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THE "IMAGE" OF OCCUPATIONAL EDUCATION IN NORTH CAROLINA, FY 1972: AN EVALUATION STUDY AND A MODEL

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SUMMARY OF FINDINGS

The purpose of this research was to investigate and describe the "image" of occupational education in North Carolina. The State Advisory Council on Vocational Education directed in their request for proposals that the subjects for the study should be an appropriate state-wide sample from the following groups: policy makers, professional administrative personnel, professional operators, students, parents, business and industry, and the general public. Thirteen hundred and forty-three people responded to the Home Economics Center for Research's occupational education questionnaire.

The occupational education questionnaire was constructed from a thorough review of the literature, information concerning similar studies, and expert vocational educators' reactions to questionnaire statements. Following test construction, a local pilot study was conducted and the questionnaire items were evaluated and written in final form. Two thousand questionnaires were mailed out, followed by one follow-up letter three weeks later.

During the waiting period between questionnaire mail-out and return, 56 personal interviews were conducted throughout North Carolina. Personal interviews were conducted by trained interviewers and data were recorded on tape recorders.

Finally, data from questionnaires and interviews were analyzed by group, district, sex, and race. Means, frequencies, percentages, and standard diviations were computed for every statement and were discussed individually in the results section of this report. Chi squares, factorial analyses, and factor analyses were applied to the data and the following major findings were reported:

1. There is no coherent, consistent, valid, or reliable "image" of occupational education in North Carolina; however, there is an overall acceptance of the concept of occupational education by the people.

2. In spite of the fact that subjects in this study were biased toward vocational education, over one-half of the general public, 25% of the policy makers, 31% of the teachers, and 24% of the parents had had no experience with occupational education.

3. A majority, 75%, of the business and industries provided training programs for their employees; however, 86% of the employers stated that they preferred hiring persons who had had occupational education training.

4. Nearly one-half of the policy makers and general public indicated that the county should provide the facility and the state should provide the operation cost for occupational programs while nearly one-half of the teachers, administrative personnel, and parents believed that both the facility and operation cost should be provided by the state.

5. The respondents stated that occupational education programs in high school do prepare students for enty-level, vocational positions.

6. There was a significant difference among educational districts concerning whether or not occupational education programs attracted new industries to the area.

7. A majority of the respondents agreed that occupational education programs adapted to the needs of the local manpower market; however, business and industry were uncertain.

8. Teachers were reported as playing a vital and needed role in helping students find jobs.

9. All respondent groups recognized occupational education programs as providing job opportunities for handicapped individuals.

10. Career education programs at the junior high level were recognized to a greater extent than are programs at the elementary level. Uncertainty prevailed in all groups regarding the concept of career education.

11. Preparing students for college did not appear to be a goal of occupational education.

12. Parents and students differed significantly from the other respondent groups stating that occupational education programs should prepare students to enter college.

13. The general public (36%) agreed that occupational education teachers required less education than do teachers of academic courses.

14. Policy makers, administrative personnel, teachers, business and industry, and the general public agreed that scholastically able students are discouraged from entering occupational education programs. Parents and students disagreed with this concept.

15. The concept that occupational education programs develop good work habits and attitudes was supported by all groups of people in North Carolina.

16. Responses indicated that the people of North Carolina believed that vocational programs are planned by program administrators and business and industry; however, the role of the local citizen in program planning was confused and uncertain.

17. Occupational education programs were not recognized as being too costly by the citizens of North Carolina. It is possible that more funds and expanded programs would be acceptable.

18. North Carolinians believed strongly that occupational training was for all socio-economic levels and all levels of intelligence. Business and industry respondents agreed to a lesser degree than did the other respondents concerning training for socio-economic levels and levels of intelligence.

19. Respondents agreed with both specific and cluster approaches in occupational education; however, specific skill preparation was favored slightly. Business and industry showed more uncertainty concerning these concepts.

20. The school administrators and the general public viewed the administrators' support of occupational education programs to be greater than did the other respondents.

21. Business and industry personnel showed significant uncertainty and disagreement with the concept that occupational education programs anticipated the future needs of society.

22. The majority of the groups disagreed that occupational education programs were meeting the manpower needs of society.

23. Citizens of North Carolina viewed occupational education programs as endeavoring to solve or help solve societal problems.

24. Business and industry personnel questioned the value of attention given to career preparation at the high school level.

25. Responses from all groups affirmed that not enough information is available to the general public.

26. All groups agreed that college did not guarantee success.

27. Guidance services were recognized as being inadequate especially in relation to vocational guidance.

28. Teachers, parents, and students responded more favorably concerning the service areas of occupational education than did the other respondents. Business and industry personnel and the general public were quite negative in their appraisal of programs.

29. The quality of the teacher was recognized repeatedly as being the key to a successful program.

30. Vocational office education programs were viewed as the strongest, most popular, and most effective programs by persons interviewed.

31. Occupational home economics programs were least known and agriculture education was considered as being outdated by persons interviewed.

Implications

The following implications were constructed from the data analyses:

1. If occupational education programs are to be accountable in meeting the needs of the people, program emphases must be updated and programs must be expanded and strengthened.

2. Teachers assume a major role in the success of occupational education programs; therefore, teacher preparation programs should be evaluated to determine their effectiveness in preparing qualified teachers.

3. The competencies needed by teachers for each occupational education service area should be clearly defined, and evaluative measures for determining the degree of competency must be devised.

4. The ambiguity of the "image" of occupational education could be clarified with proper publicity and public relations campaigns.

5. To enhance the "image" of occupational education, the career education concept for North Carolina schools must be clearly defined and role responsibilities of educational personnel and agencies involved must be identified.

6. Business and industry personnel should be involved to a greater extent with the planners and implementers of occupational education programs.

7. Further research is needed to determine whether or not occupational education programs are actually preparing students for entry level positions.

8. Occupational education programs in each of the service areas should be evaluated in depth as to the way in which each is perceived. Such information could be of particular significance to program planners and implementers.

9. Time-series studies should be undertaken to test the suggested implications listed here and to determine lasting and changing aspects of the "image."

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INTRODUCTION

The Vocational Education Act of 1963 and the 1968 amendments to that act have been characterized as charters for some of the important changes in emphases for American education. With the passage of these legislative acts, vocational education programs throughout the nation gained a great deal of impetus. Programs have been developed, strengthened, expanded, and improved in an effort to provide educational opportunities for more individuals than have ever before been reached. It is evident that vocational education programs, like so many other government supported programs today, must become more accountable to both the grantors and the consumers of the product.

The purpose of vocational education, or occupational education as it is termed in North Carolina, is to prepare individuals to successfully engage in occupations which are both socially useful and personally satisfying. Such an educational program should provide for the development of skills, knowledge, and appropriate attitudes which would enable individuals to enter vocations or occupations of their choosing and also to make progress and to advance within their field. In an effort to meet the needs of people in this State, occupational education programs in agriculture, business and office occupations, industrial arts, home economics, distributive education, health services, and trade industries have significantly increased in number.

Recently the concept of career education has gained nationwide acclaim. The implementation of this concept is considered a major objective of the U. S. Office of Education. Sidney P. Marland, Jr., United States Commissioner of Education, has suggested that career education is going to be a sweepingly popular concept from the standpoint

of both the general public and educators. Career education is what all education should be. Thus, vocational or occupational education must be viewed as a part of this global concept.

In general, career education accomodates individual differences through a continuous, experience-centered, and evaluative process. It facilitates the development of career awareness, career orientation, career exploration, decision-making, and preparation in relation to an ever-changing world of work.

The concept of career education is being fostered in North Carolina as one aspect of occupational education. Exemplary programs in career awareness and career exploration have been in operation the past few years in North Carolina.

The process of change, along with the implications of change, has come to play an increasingly important and influential role in the established institutions of the world, and certainly touches directly almost all individuals in our hemisphere. The field of education, especially occupational education, has been subject to the influences of the pressure for change; in fact, change has been one of the most significant factors permeating educational legislation over the past decade. With such rapid and diverse change, it has become imperative that occupational educators at all levels keep abreast of legislation and institute ongoing evaluation of the occupational education programs and the projected image of the field.

The North Carolina State Advisory Council on Vocational Education is charged with evaluating vocational educational programs, services, and activities. It seemed appropriate that the Advisory Council contract with institutions and/or public agencies in the State for some of the

needed evaluation activities. One of the areas selected by the Advisory Council for investigation during the fiscal year 1972 was the "image" of occupational education in North Carolina, since little definitive information was currently available regarding the way people in the State viewed occupational education.

Occupational education, career awareness, and career exploration programs are increasing in number yearly. However, the "image" of these programs has not been determined. There are numerous questions which have been and are being raised by persons involved in planning and implementing these programs. Some of the questions are: Do the people in North Carolina know what is meant by occupational education? How do the citizens of North Carolina envision occupational education? Are the occupational education programs relevant to the needs of youth and adults in North Carolina? How can the image of occupational education be improved, if this is deemed necessary?

Answers to some of these questions regarding the "image" of occupational education, and to questions regarding other factors which are related to "image," should be useful in the planning and implementation of new programs in this field. It is believed that the findings of this study will provide useful information to not only the Advisory Council, but to legislators, occupational educators at all levels, and to the general public.

The overall purpose of this study, then, was to evaluate vocational or occupational education programs, services, and activities throughout the State of North Carolina. Since this was a beginning study, the approach was to focus on what is called the "image" of occupational education in an effort to identify the factors inherent in this "image."

Another purpose of the study was to develop a model for an ongoing evaluation of occupational education; i.e., to develop a model which would be adequate for continuous or pre-post appraisal of the factors underlying the"image."

The specific objectives of the study, therefore, were as follows:

1. To conceptualize, develop, and pretest an instrument or index to be used in evaluating "image" and factors inherent in this "image" of occupational education in North Carolina.

2. To use this index to test, record, and evaluate the "image" of occupational education in the eight educational districts (Educational Directory, 1970) as seen by educational policy makers, professional educational administrators, professional operators or teachers, students, parents of students, business and industry employers, and the general public.

3. To analyze, specify, and rank factors inherent in the "image" of occupational education in the eight districts as seen by these aforementioned groups.

4. To design a model which will be adequate for either continuous or intermittent evaluation of the "image," or the "image" factors, by using this study for baseline or beginning data.

Certain terms are quite familiar to many of the readers; however, for the sake of clarity and specificity all of the major terms used were defined as follows:

Occupational education. Education to prepare individuals to engage successfully in occupations that are socially useful and satisfying. It should provide for the development of skills, attitudes,

and knowledge that will enable individuals to enter or make progress in their chosen vocations or occupations.

Career education. The concept that all educational experiences, i.e., curriculum, instruction, and counseling, should be geared to preparation for economic independence and an appreciation for the dignity of work.

Business education (vocational office education). A program of instruction designed to train for employment in business occupations, including secretarial jobs, bookkeeping, and office machines.

Distributive education. A program of instruction designed to train for careers in selling, marketing, merchandising, and business management.

Cooperative work-study program. A program of alternating study in school with work on the job, the two phases being so planned that each contributes to the student's education.

Trade and industrial education. A program of instruction which develops basic manipulative skills, safety, judgement, and technical knowledge related to a trade or industrial occupation for the purpose of preparing youth for initial employment.

Agricultural education. A program of instruction to train for occupations in farming and related fields, including agricultural mechanics, agricultural business, ornamental horticulture, conservation, forestry, and other occupations involving knowledge and skills in agricultural subjects.

Health occupations. A program of instruction designed to train individuals for employment in health care services such as medical assistant, pharmacy assistant, dental assistant and practical nurse.

Consumer and homemaking education. A program of instruction designed to prepare youth and adults for the role of homemaker, or to contribute to the employability of youth and adults in the dual role of homemaker and wage earner.

Occupational home economics. A program of instruction designed to prepare individuals for gainful employment in occupations requiring home economics knowledge and skills.

Industrial arts education. A program of instruction designed to expose students to practical and useful problems involving the use of tools, materials, processes and knowledge, all of which are related to the skilled trades, the creative arts, and to products and services of manufacturing.

Technical institute. An institution offering a two-year terminal program leading to the degree of associate in applied science which emphasizes preparation for employment as a technician in a specialized field such as may complement the professional engineer.

Community college. An incorporated institution offering one, two, or three years of work in terminal courses of collegiate grade and quality.

Finally, a word should be said about the form of this report. The reader will note that the table of contents contains four basic sections plus the appendices. Frequently a report such as this one contains a chapter titled "Results" and another titled "Discussion." In the case of this particular study it was decided that combining the results and discussion sections would provide a more practical and useful report. Thus, each facet of the study was discussed as it was reported. The results were then summarized, conclusions were drawn, and certain recommendations were offered.

REVIEW OF LITERATURE

The literature reviewed for this study covered the period from 1964 to 1972. Journal articles, books, phamplets, and microfiche were reviewed. A computer retrieval system was utilized to assure comprehensive coverage of the literature. In the following discussion, occupational education and vocational education are used interchangeably. The review of literature covered the following areas: (a) objectives, (b) attitudes toward vocational education, (c) problems and criticisms, (d) need for expanded vocational education programs, (e) need for support of vocational education, and (f) career education.

Objectives

The guiding purpose of vocational education is to help every educable person to develop the competencies he needs in order to enter and advance in a vocation. The generally accepted objectives of vocational education are to guide the student to:

(a) Make an appropriate choice of occupational specialization consistent with his interests and abilities.
(b) Develop desirable attitudes and basic skills and master technical information required for success in this chosen occupation.
(c) Gain an understanding of how to secure a job, and plan for advancement.
(d) Develop ability to make wise decisions in accord with changing socioeconomic conditions.
(e) Assume responsibilities as citizen, homemaker, employee, or employer (Cross, 1967, p. 35).

Support Needed for Vocational Education

Vocational education, in order to accomplish its objectives, needs the support and cooperation of the general public, business and industry, policy makers, administrators, and educators. Citizen involvement and support are vital to healthy vocational programs. According to McDowell (1965), "The adequacy and effectiveness of programs of vocational

education are contingent upon the degree of citizen cooperation and participation in planning and evaluation (p. 30)." Education of the public, especially parents, regarding the value and importance of vocational education, is necessary to increase their involvement in vocational programs (Divita, 1971).

Business and industry all need to be involved in planning and implementing vocational education programs. If vocational education programs are to achieve their goal of placing every graduate in a job, the involvement of business and industry in program planning is essential (Polinchak, 1972). Vocational educators also need to be aware of the requirements of business and industry in order to prepare students for entry-level positions after graduation.

Attitudes toward Vocational Education

The greatest obstacles to realizing vocational education's potential are the prejudices that categorize all nonacademic occupations as second-class (Loomis, 1971). Attitudes toward vocational education have also affected the number of vocational programs in the school curriculum. The 'low status' stereotype associated with vocational education programs was singled out by labor leaders and employees as contributing to the insufficient number of vocational programs (Divita, 1971). There is general agreement that vocational education needs to be upgraded (Rhodes, 1967). Considering the fact that only 20% of all students graduate from college, too much emphasis has been placed on preparing every person of high school age for college. Not enough attention has been given to preparing youth for vocations.

The belief that vocational education is terminal and useful primarily to students of lesser intellectual competence is an almost universal belief. Actually, according to Dobrovolny (1970), most people believe that the only way to become successful in an affluent society is to obtain a bachelor of arts or science degree. Consequently, most parents are eager for their children to go to college. They are generally unaware of the technological changes which have brought about a need for semiprofessional personnel. Parents too are unaware of the financial and psychological satisfactions which technicians enjoy. They are generally unaware of the fact that the salaries of many technicians are comparable to those of four-year college graduates. Dobrovolny (1970) cited the many vocational opportunities in the health field, e.g., x-ray technicians, nurses' aides, liscensed practical nurse, medical technicians, biomedical equipment technicians, and medical secretaries. He concluded that the bachelor's degree syndrome needed to be broken down if the manpower needs of the future are to be met; that is, there are many socially useful and personally satisfying jobs in our society which require technically trained, not college educated, persons.

Conflicting evidence concerning parent and student attitudes toward vocational education was reported in a statewide survey made by the Ohio State Department of Education (Ohio Pride, 1971). A general conclusion was that both parents and students were positive in their response to vocational education. They were clearly in favor of vocational guidance and sanctioned improvement in guidance practices. Responses toward educational programs which related to future employment or education beyond high school were positive.

Respondents were strongly in favor of experience as a prerequisite for the vocational education teacher and of vocational education instructors helping students with job placement after graduation. A majority of parents were satisfied with the school program in their school district.

Although the literature revealed many references to the 'low status' stereotype associated with vocational education, data on the attitudes of school board members and administrators revealed generally favorable attitudes toward vocational education. The attitudes of school board members toward occupational education in New York state were found to be positive (Spengler, 1970). Board members from urban districts revealed more positive attitudes toward occupational education than members from suburban or rural districts. Members of the Board of Cooperative Educational Services (BOCES) were more positive toward occupational education than their fellow board members in suburban and rural districts. The involvement of BOCES members in the occupational education decision-making process may explain their more positive attitude.

In a study by Divita (1971), the attitudes of school administrators and boards of education members in West Virginia were described as favorable. The following conclusions were reported: (a) school administrators and boards of education members highly valued vocational education at the secondary level; (b) school administrators and boards of education members believed that vocational education should have a place in the secondary school curriculum and that the schools have a responsibility for providing vocational education; (c) school administrators were strongly in favor of expanding vocational education programs, and (d) school administrators and school board

members were in favor of more diverse curricular offerings, more intense and accessible programs, and more money for occupational education programs.

Generally negative attitudes toward vocational education were reported for school teachers and minority groups in two instances. Conroy (1969) found that general education teachers at the junior high school level believed vocational education was a suitable experience for tradesmen and technicians but not for scholastically able students. Minority groups, according to Saavedra (1970), held vocational education in poor esteem. In conclusion, effective vocational education programs were not possible when students, parents, teachers, administrators, and minority groups regarded vocational education as an activity for second-class citizens (Beaumont, 1971).

Problems and Criticisms

Attainment of the vocational education objectives depends upon many factors. Curriculum planners must be responsive to changes in the labor market and to the needs of many segments of the population (Mangum, 1971). Because of our rapidly changing society there is a great need for flexibility in vocational education programs. Vocational education programs must be able to adjust to local needs and should take into account future occupational demands.

Technological growth has made vocational education imperative. Essex (1967) declared, "General education, per se, unbuttressed by employable skills, no longer is an acceptable concept for the American People (p. 2)". Since 80% of all youth enter the labor market without baccalaureate degrees, there is a great need for vocational education (Beaumont, 1971). Vocational education is needed not only for youth

but for adults who for one reason or another must be retrained.

Vocational education has frequently been criticized for not keeping pace with the constantly changing occupational structure of an industrial society (Loomis, 1971). Vocational education has also been criticized for failing to respond adequately to the forces of supply and demand. An article entitled "Reforming Vocational Technical Education" (1970) stated that students are being trained in declining occupations and too little is being done in new and growing occupations. Somers (1968) affirmed that the vocational educators' response to changes in the labor market has been sluggish and inadequate.

In a study in Missouri (Karnes, 1966), for example, results indicated that vocational education programs expected increased enrollment in areas where manpower needs were greatest. The areas of health occupations and certain industrial and technical fields were seriously neglected.

There is a shortage of vocational education courses in some geographical areas. Divita (1970) found a shortage of programs in West Virginia and declared that the high schools needed to expand their curricula to include more vocational education courses.

Need for Expanded Vocational Education Programs

Population growth in the United States is one factor which indicates a need for expanded vocational education. At the present time, only 14% of all high school students are enrolled in vocational education programs (Harris, 1971), but a doubled enrollment in the field of vocational education is predicted by 1975.

Another factor indicative of the need for more vocational training is the high unemployment rate of youth in this country. The unemployment

rate for youth between 18 and 24 who have not had vocational education is 24%. However, Marland (1972) reported, "The average unemployment rate of vocational education graduates between the ages of 18 and 24... is only 5.2%, substantially less than the unemployment rate for the Nation as a whole (p. 15)." Evidence indicates that secondary school students in vocational education get jobs faster, hold them longer, and are more satisfied with their jobs than are general education graduates (Evans, 1969).

Social problems necessitate an expanded concept of vocational education. According to a National Advisory Council on Vocational Education publication (The Bridge Between Man and His Work, 1968), vocational education may help alleviate problems such as poverty, urbanization, slums, juvenile delinquency, and unemployment. Vocational education can also do much for the slow-learner, the drop-out, and the incorrigible (McDowell, 1965).

Increased appropriations by the federal government to vocational education programs are necessary before vocational education can make any impact on social problems. Congress has appropriated less than half of the amount authorized by the Vocational Education Amendment of 1968 (Polinchak, 1972). The cost of vocational education programs is higher than the cost of academic programs, and, consequently, there is a need for the federal government to supplement the efforts of state and local governments (Barlow, 1970). Greene (1971) asserted that vocational education was being short-changed; i.e. state and local governments spent proportionately larger sums for post-baccalaureate training than for vocational-technical education. Increased leadership

at the federal level is also needed in order for vocational education to accomplish its objectives (Burkett, 1967).

Vocational educators need to provide more services for females. In the past, vocational education has been criticized for failing to respond adequately to the vocational needs of women. Except for programs in home economics and office occupations, vocational education for females has been seriously limited (Wenrich, 1970). Girls should be encouraged to enter a wider range of skill training programs (Martin & Martin, 1971). All educators need to expand the vocational self-concept of girls and help them develop their potential for employment in a variety of occupational fields (Simpson, 1970).

Career Education

The new concept of career education is replacing the old image of vocational education. Career education represents a trend toward integrating vocational education and general education (Beaumont, 1971). Vocational education cannot be limited to the skills necessary for a particular occupation, but should include all educational experiences which help a person discover his talents, choose an occupation, and use his talents successfully in employment (Little, 1971). All educational experiences, including curriculum, instruction, and counseling, should have as their objectives the preparation of the student for education independence and an appreciation for the dignity of work.

Wykle (1972) described career education as "a comprehensive educational program focused on careers, which begins in Grade 1 or earlier and continues through the adult years (p. 51)." In elementary schools, students learn about the wide range of jobs in our society and the roles and requirements involved. Emphasis is on awareness of

the world of work. In junior high schools, students explore several specific clusters of occupations with actual field experience and observation as well as classroom instruction. In high school, students have the following three options: (a) intensive job preparation for entry into the world of work upon leaving high school, (b) preparation for postsecondary occupational education, or (c) preparation for four-year college.

On the changing image of vocational-technical education, Shilt (1970) commented,

> There is a general awakening on the part of school superintendents and principals which recognize the potential of vocational education as an educational process. There is recognition that preparation for the world of work must begin at an early age; that the school has a major responsibility for bridging the gap between school and employment; that the process of vocational, or career, education must continue throughout life (p. 14).

In summary, the generally accepted objective of vocational education is to prepare individuals for satisfying employment. The support of all segments of the population is vital to the achievement of vocational education objectives. Probably the greatest obstacle to the realization of vocational education goals is the 'low status' stereotype associated with nonacademic programs. There is evidence, however, of a change toward a more favorable image of vocational education in recent years.

The rapidly changing demands of industry and society indicate a need for increased flexibility in vocational education program planning. Technological and social demands suggest, also, the need for an expanded concept of vocational education. Finally, the new concept of career education appears to solve many of the problems which have previously been obstacles to the realization of vocational education's potential.

METHOD

Since this was a beginning study and since the key word, "image," is such a nebulous concept, a survey method was used to gather the data. The major focus was on the attitudes of certain segments of the population in North Carolina toward occupational education. Although in a survey such as this one validity is always a concern, certain safeguards were used to increase both external and internal validity. Admittedly many of the techniques were subjectively designed; however, the use of pilot studies, large sample, and more sophisticated analyses of data are well accepted techniques in survey research.

Subjects

Seven groups of subjects were used in the survey: (a) policy makers, one school board member from each of the 100 counties in North Carolina and 100 drawn at random from members of boards of trustees of North Carolina's community colleges and technical institutes, members of the North Carolina General Assembly, members of the State Board of Education, members of the State Department of Public Instruction, and members of the North Carolina Board of Higher Education; (b) administrative personnel, one elementary and one secondary school principal from each county in North Carolina and 100 subjects selected at random from public school superintendents, area directors of occupational education, and local directors of occupational education; (c) teachers, two selected by each of the 200 elementary and secondary school principals; (d) parents, one for each of the 400 students selected; (e) students, two selected by each of the secondary school teachers in the sample; (f) business and industry employers,

two for each of North Carolina's 100 counties, selected from Dunn and Bradstreet, Million Dollar Directory, and the Directory of North Carolina Manufacturing Firms; and (g) general public, 100 selected at random from a list of the state's county commissioners.* (Table 1 shows the sample distribution.)

A total of 2000 subjects were drawn for the survey. Since counties were frequently used to stratify the sample, each of the eight educational districts was represented in the subsamples.

Procedure

The first task for the project staff was to conduct a thorough literature search and review. From this review and computer search a frequency count was made of all the characteristics attributed to occupational education programs (Appendix A). The first draft of the questionnaire was then developed from these data in the form of a series of statements to which a Likert type scale was applied. Such a scale lends itself well to survey research in that the summated ratings are composed of a set of attitude items of approximately equal attitude value. Subjects can respond to items with degrees of agreement or disagreement. As a result, the ratings can be placed on an agreement continuum regarding the characteristic being studied (Kerlinger, 1964).

The characteristics derived from the literature were assigned to subject matter categories to facilitate the frequency count. All of the items were to be rated on a five point scale ranging from "Strongly Agree" to "Strongly Disagree."

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* The county commissioners were used for this category since they generally represent a wide variety of occupations.

TABLE I

Distribution and Return of Questionnaires by Groups

	Mailed Out	Returned	Total Returned
1. Policy Makers			
School board members	100	67	
Board of trustee members General Assembly State Department of Public Instruction North Carolina Board of Higher Education	100	66	
			133
2. Professional Administrative Personnel			
Secondary school principals	100	71	
Elementary school principals	100	73	
School superintendents Area directors of occupational education Local directors of occupational education	100	92	
			236
3. Professional Operators			
Elementary school teachers	200	82	
Secondary school teachers	200	195	
Teachers (level unknown)		4	
			281
4. Parents	400	274	274
5. Students	400	285	285
6. Business and Industry Employers	200	87	87
7. General Public	100	47	47
Total	2,000		1,343

Judges. The first draft of the questionnaire was then sent to five judges who were considered experts in the area of occupational education. The individuals were asked to judge whether or not each characteristic was a part of the "image" phenomenon. They were further asked to indicate any of the statements which they thought lacked clarity. They were also asked to add any other statement which they considered to be a part of the "image" but which was omitted from the questionnaire.

The recommendations of the judges were as follows: (a) to limit each statement on the questionnaire to one main idea; (b) to include only those statements which reflected the actual current condition of occupational education; (c) to word the statements so that one-half were positive and one-half negative; (d) to omit occupational education jargon, i.e., broad clusters; and (e) to lower the overall reading level of the instrument because it was too high for some of the respondents. On the basis of these recommendations the questionnaire was revised.

Pilot Study. A small pilot study was then conducted primarily for the purpose of testing the instrument. Completed questionnaires were obtained from 140 individuals in the Greensboro area. The subjects included: 35 students and their parents, 35 teachers and/or administrators, and 35 business and industry employers.

Based on the results of this pilot study certain refinements were made to the instrument. The changes in the questionnaire were as follows: (a) questions which did not discriminate between favorable and unfavorable attitudes were eliminated; (b) the scale was changed from a forced choice one by adding a "No Response" (NR) or "Unknown"

category; and (c) statements which included two or more ideas were expanded to two or more questions. In its final form (Appendix B) the questionnaire contained 46 items.

There were two addenda to the instrument. The first was a personal data sheet on which each respondent provided such information as county of residence, sex, race, age, and educational level (Appendix C). Obviously these data sheets differed somewhat according to which group in the sample the respondent belonged. The sheets were color-coded by category of the respondent, i.e., pink for students, yellow for parents, blue for teachers, white for all other groups.

The other addendum became the last page of the questionnaire itself (Appendix B). This section asked for specific information about the image of each of the areas of occupational education. Each area was to be rated on a five-point scale ranging from "Very Good" to "Very Poor" with an "Uncertain" midpoint. Space was provided and respondents were asked to write comments on their ratings of any or all of the areas listed. The second part of this addendum asked the respondent to answer "Yes" or "No" to whether he knew the kinds of occupations for which students in specific kinds of occupational education programs could be trained.

Mail-out. The questionnaire in final form was mailed to the 2000 persons drawn for the sample (Table I). Included in the mail-out were self-addressed, stamped envelopes for returning the completed questionnaires. A cover letter was also included with each of the instruments (Appendix D). The letter described the details of the project and the reasons the respondents were asked to participate in the study.

The letters varied somewhat according to the category of the recipient of the questionnaire. The elementary and secondary school principals were given special instructions regarding the return of the questionnaires. The elementary school principals were asked to return the teachers' questionnaires along with their own. The secondary school principals were asked to return the teachers', students', and parents' questionnaires along with their own.

Three weeks after the instruments were mailed approximately 1000, or 50 percent, had been returned. A follow-up letter (Appendix E) along with an additional questionnaire was sent to each subject who had not yet responded. The letter was a reminder of the urgency of the research and a request that the completed questionnaire be returned immediately. The final return figure was 1,343, or about 67% of the 2000 subjects in the sample.

Interviews. Personal interviews were conducted as an adjunct to the larger survey. From each of the eight Educational Districts a city to be visited was arbitrarily selected. A high school in each of the eight cities was then selected, using as a source the North Carolina Educational Directory. Preliminary letters were then sent to the principal of each school selected, informing him of the purpose and date of the visit. On the actual visit to the community the interviewer met with one person from each of the seven groups of respondents, being careful not to interview anyone who had participated in the general survey. At the school itself it was possible to interview the principal or assistant principal, one teacher, and one student. Frequently a parent was also readily available for the interview. In the community it was possible to interview a school board member

and a business or industry employer, and this was done."

It was difficult to identify respondents that met the criteria for the general public category. After some fruitless attempts to find general public respondents who would or could respond, the interviewers filled this category with a non-teaching, non-administrative employee of the school. It was realized by the research staff that this biased the sample considerably, but there seemed to be no adequate way of dealing with the problem in this study.

Fifty-six persons were personally interviewed. The interview itself was not a highly structured one although the basis for the interview was the original questionnaire. Approximately one-fourth of the 46 questions were used (ten in all), and the subjects were given every opportunity to elaborate on their answers. In addition, each subject was asked to describe his image of each of the specific areas of occupational education (Appendix F). Most of the interviews were recorded on cassette tapes, although this was impractical in a few instances because of the setting of the interview.

Data Analysis

As the mailed questionnaires were returned to the Research Center, the responses and identifying information were coded and punched on computer cards. The data cards were sent to the computer center at North Carolina State University for analysis.

The data were analyzed in several different ways. First, a description of the subjects who were used in the survey was derived from the personal data sheets. The description yielded an overall picture of the sample along such dimensions as sex, race, and educational district.

Means, standard deviations, and percentages for all groups were calculated and printed out by the computer. Chi-square analyses were calculated for the total sample by each question and across all of the breakdowns (sex, race, group, district). Factor analyses were also performed on all the rated statements by the total sample and by individual groups, but not by districts. Finally, factorial analyses of variance were performed on the data by sex, race, group, district, and all possible paired interactions of these data.

RESULTS AND DISCUSSION

A short explanatory note is in order before a direct discussion or report is undertaken concerning the nebulous status of the "image" of vocational or occupational education in North Carolina. One general or overall result was repeatedly confirmed; there is no coherent, consistent, valid, or reliable "image." "Image"is a complex, diffused concept which most reliably varies with a great many psychological, environmental, economical, and situational factors. This is not to say that this concept is meaningless or that this investigation failed to clarify the "image." The "image" is clouded and varied; this result came through repeatedly in responses made by both implementers and users of occupational services.

Since the results gave evidence of an ambiguous "image," several questions were appropriate. First, are there any basic components or in-common factors in North Carolinians'"image"of occupational education? The answer is "yes" and the results of this study suggest such factors (see Factor Analyses Section). Secondly, since the result of this investigation demonstrated that the occupational education"image"is ambiguous, is it a fault then of the data collection instrument or procedure? The answer is "no." Varied statistical testing, two methods of data collection, and redundant data comparison techniques provided built-in replications of the results. In other words, no matter how the data were analyzed, similar results occurred. Finally, since the "image" is incomplete and varied and since a description of the "image" will at best reflect this confusion, a great amount of study effort was invested in projecting various alternatives as to what the "image" might and should be. The authors understand that it

is not their place to design what the "image" might and should be, but they would be negligent in not pointing out the obvious void in the public's mind concerning what vocational education really is. The planners, administrators, and implementers have a golden opportunity to replace ambiguity with certainty through proper publicity and public relation campaigns. The results of this study suggested what alternatives are possible in filling this void about a proper"image"for occupational education.

Characteristics of Surveyed Groups

Potentially every resident of North Carolina is a recipient or consumer of occupational education programs. The rich and the poor, males and females, Blacks and Whites, and mountain, piedmont, and coastal people of the state all need to and should have a voice in what their state does in occupational education.

An assumption was made that as people's characteristics changed, so would "image" change. With this in mind, and with the goal of obtaining reliable and valid results, a large sample of people were surveyed, cutting into every county in North Carolina and polling all types of publics. What follows now is a description of the subjects used in this survey along five specific dimensions.

Sex. Of the 1,343 respondents, 666 were male and 677 were female. The majority of the policy makers, administrative personnel, business and industry personnel, and general public persons were male while the majority of the teachers, parents, and students were female (Table 2).

Race. The majority of all respondents were White (Table 3). Nineteen of the 1,343 respondents did not answer the question concerning race. Ten of the nineteen American Indian respondents were teachers.

The reader should understand that this sample was basically random and that the percentages should approximate the general population in their respective groups.

TABLE 2

Number and Percent of Male and Female Respondents According to Group

Groups	Male		Female		
	Number	Percent	Number	Percent	Total
Policy Makers	120	90	13	10	133
Administrative personnel	226	96	10	4	236
Teachers	56	20	225	80	281
Parents	73	27	201	73	274
Students	69	24	216	76	285
Business and Industry	79	91	8	9	87
General Public	43	91	4	9	47
Total	666		677		1,343

Age. Three-fourths (75%) of the general public, 69% of the policy makers, and 51% of the administrative personnel were 45 years of age or older (Table 4). A majority of the parents, (90%) were between the ages of 35 and 54 years. Two-thirds of the business and industry personnel were between the ages of 35 and 54 years. Teachers were the only group with an appreciable number of persons (12%) 24 years of age or younger. Students were not requested to indicate their age.

TABLE 3

Racial Status of Respondents by Groups

Group	White		Black		Am. Indian		Other		No Response		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Policy Makers	122	92	8	6	0	0	0	0	3	2	133
Administrative Personnel	209	89	24	10	1	.4	0	0	2	1	236
Teachers	223	79	45	16	10	.4	0	0	3	1	281
Parents	201	73	60	22	7	3	1	.5	5	2	274
Students	218	76	61	21	1	.4	1	.5	4	1	285
Business and Industry	86	99	0	0	0	0	0	0	1	1	87
General Public	46	98	1	2	0	0	0	0	0	0	47
Total	1,105		199		19		2		18		1,343
Percent	82.3		14.8		1.4		.2		1.3		100

TABLE 4

Number and Percentage of Respondents Within Age Ranges by Groups

Group	24 or younger		25-34		35-44		45-54		55 or older		No Response		Total
	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	
Policy Makers	0	0	6	5	35	26	50	38	41	31	1	1	133
Administrative Personnel	1	.4	36	15	78	33	77	33	42	18	2	1	236
Teachers	34	12	65	23	69	25	66	23	43	15	4	1	281
Parents	5	2	9	3	152	55	95	35	10	4	3	1	274
Business and Industry	0	0	13	15	26	30	30	34	16	18	2	2	87
General Public	0	0	2	4	10	21	21	45	14	30	0	0	47
Total	40		131		370		339		166		12		1,058
Percent	3.8		12.4		35.0		32.0		15.7		1.1		100

Highest Academic Attainment. Respondents were requested to indicate the highest academic level attained. Only two (2%) of the policy makers had less than a high school education (Table 5). Twenty-nine percent had attained bachelor's degrees while 14% had attained master's degrees.

The majority (80%) of the 236 administrative personnel possessed master's degrees and 6% held doctoral degrees. Of the 281 teachers, 77% held bachelor's degrees and 20% master's degrees.

The highest academic level attained by nearly one-half (45%) of the 274 parents was high school. Seventy of these (25%) had less than a high school education. Twenty-seven parents (10%) had attained bachelor's degrees while 12 (4%) had attained master's degrees.

Of the 87 business and industry personnel who responded, 32% held bachelor's degrees; 24% had high school diplomas; and 20% held certificates beyond high school. Only one person had earned a doctoral degree.

Forty-three percent of the 47 general public possessed high school diplomas, 21% held certificates beyond high school, 15% had bachelor's degrees, and 9% had earned doctoral degrees. This 9% of the general public holding doctoral degrees is not reflective of the general public and represents a sampling bias in this study.

Students were requested to indicate their grade level. One-half (50%) of the 285 students were enrolled in the twelfth grade. Eleven percent were eleventh graders; 16% ninth graders, and 13% tenth graders.

Group. The position held by 50% of the 133 policy makers was that of school board member. Thirty-five percent were board of trustee members. Twenty-five percent of the policy makers indicated that they had no experience with occupational education. Twenty-two (17%)

TABLE 5

Highest Academic Level Attained by Groups

Academic level	Policy Makers		Administrative Personnel		Teachers		Parents		Business & Industry		General Public		Total	
	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent	N	Per-cent
Grade school	1	1	0	0	0	0	20	7.3	1	1	0	0	22	2.1
Not high school	1	1	0	0	0	0	50	18.3	1	1	2	4	54	5.1
High school	23	17	0	0	2	.7	122	44.7	21	24	20	43	188	17.8
Certificate beyond high school	18	14	0	0	5	1.8	28	10.3	17	20	10	21	78	7.3
Associate degree	5	4	0	0	0	0	4	1.5	6	7	1	2	16	1.5
Bachelor's degree	39	29	25	11	215	76.5	27	9.9	28	32	7	15	341	32.3
Master's degree	19	14	188	80	55	19.6	12	4.4	6	7	2	4	282	26.7
Doctoral degree	0	0	15	6	0	0	0	0	1	1	4	9	20	1.9
Other	27	20	8	3	3	1.1	8	2.9	4	5	1	2	51	4.8
No response	0	0	0	0	1	.3	2	.7	2	2	0	0	5	.5
Total	133		236		281		273		87		47		1,057	100.0

indicated their experience with occupational education was as a parent whose child had taken such courses. There were 41% who indicated "other" in relation to occupational experience. One-half of this number of policy makers specified their position as school board members or trustees as having provided experience in occupational education.

Principals comprised 61% of the 236 administrative personnel; 31% were elementary principals and 30% were secondary principals. Twenty percent were superintendents and 11% were local occupational education directors. Sixteen percent of the administrative personnel indicated no experience with occupational education. Of the secondary principals 29% were responsible for the administration of occupational education programs. Thirty-two (14%)of the respondents had taken occupational education courses as a student and 14% had taught occupational education subjects.

There were 281 teachers in that group of respondents. More than half of the respondents were elementary teachers (29.2%) and 27.8% were home economics teachers (Table 6). When asked about experience with occupational education, 31% of the teachers indicated no experience. Eighty-six (31%) had experience as occupational education teachers, 8% indicated experience as a student in occupational education, and 8% were parents of a child who had been or was enrolled in occupational education courses.

The majority (73%) of the parents who responded to the questions were female. Parents were requested to state their present occupation. Occupations were categorized according to Warner's classification of social class (Warner, 1949). The occupations were categorized as follows: professionals; proprietors and managers; business men; clerks and kindred workers; manual workers; protection and service workers;

TABLE 6

Number and Percent of Professional Operators According to Position

Position	Number	Percent
Science	7	2.5
English	17	6.1
Mathematics	5	1.8
Art	4	1.4
Social studies	15	5.3
Physical education	5	1.8
Counselor	7	2.5
Agriculture	7	2.5
Home economics	78	27.8
Business education	19	6.8
Trade and industry	8	2.9
Distributive education	2	0.7
Elementary teacher	82	29.2
Other	21	7.5
No response	4	1.4
Total	281	100.2

and farmers. Nearly one-fourth (24%) of the parents' occupations were classified as manual workers and 19% were clerks and kindred workers. (Table 7).

TABLE 7

Occupation Categorization of Parents

Category	Number	Percent
Professionals	46	16.8
Proprietors and managers	12	4.4
Business men	6	2.2
Clerks and Kindred workers, etc.	52	19.0
Manual workers	67	24.4
Protective and service workers	23	8.4
Farmers	26	9.5
No Response	42	15.3
Total	274	100.0

Over one-half (54%) of the parents had had experience with occupational education because their children had or were enrolled in occupational education courses. Twenty-four percent of the parents indicated no experience with occupational education and 11% of the parents had at one time been students in occupational education courses.

The majority of the 285 students (81%) had taken or planned to take occupational education courses. More students were enrolled in vocational office education and occupational home economics (18.6 and 23.5% respectively) than in other service areas (Table 8).

TABLE 8

Student Enrollment by Service Area

Service Area	Number	Percent
Agricultural Education	22	7.7
Vocational Office Education	53	18.6
Trade and Industry Education	16	5.6
Occupational Home Economics	67	23.5
Distributive Education	16	5.6
Health Occupations	14	4.9
Consumer and Homemaking Education	34	11.9
Not Enrolled	46	16.2
No Response	17	6.0
Total	285	100.0

Nearly one-half (41%) of the students planned to attend a four-year college upon completion of high school (Table 9). Only one percent indicated marriage upon completion of high school. Although somewhat confused, students' intentions in relation to technical training was scored lower (14%) than was expected. The majority of students still plan to go to college.

Nearly one-half (46%) of the business and industry personnel indicated their experience with occupational education programs as an employer of occupational education graduates (Table 10). There were 10 (11%) who had had no experience with occupational education.

TABLE 9

Student Plans upon Completion of High School

Plans	Number	Percent
Marriage	3	1
Work	27	9
Work and Marriage	32	11
Community college	38	13
Four-year college	116	41
Technical training	39	14
Other	22	8
No Response	8	3
Total	285	100

TABLE 10

Experience of Business and Industry Personnel with Occupational Education

Experience	Number	Percent
As a student in occupational education courses	9	10
As a parent whose child(ren) has(have) taken occupational education courses	4	5
As an employer of an occupational education graduate	40	46
Other	19	22
No experience	10	11
No Response	5	6
Total	87	100

When asked to indicate the approximate percentage of employees who had occupational training as part of their high school program, 66% of the business and industry personnel stated that less than 9% of the employees had had occupational training. Thirteen percent estimated that between 10% and 19% of their employees had had prior occupational training. Ten percent of the personnel did not know whether their employees had been in occupational training programs.

Twenty-five percent of the business and industry personnel had no employees who had had occupational training as part of their high school program. Of the business and industry personnel who had employed persons with occupational training, 33% were well safisfied, 29% moderately satisfied, and 6% were undecided.

A majority (75%) of the businesses and industries provided training programs for their employees. Generally speaking, 86% of the employers prefered hiring persons who had had occupational training. From these two statements one could conclude that business and industry recognize the need for vocational training, but prefer to do the training themselves, This is indicative of a great amount of redundance evidenced in the vocational users-planners-implementers complex.

Persons responding in the general public group were requested to state their present occupation. Of the 43 respondents, 23% were farmers; 17% professionals; 15% proprietors and managers; 11% business men; and 11% were clerks and kindred workers. Seventeen percent did not respond to the question and the remaining 6% were manual workers and protective-service workers.

Fifty-five percent of the respondents did not have children presently enrolled in public schools. Eighty-one percent of the

respondents have had children enrolled in the public schools.

Twenty-five (53%) of the 47 respondents indicated no experience with occupational education. Only 13% had children who were or had been enrolled in occupational education courses, 9% had been enrolled as a student in such courses, and 6% had taught occupational courses.

Responses from the general public were few in number and one should speculate on "why." Does the low percentage of response indicate a lack of public support for occupational education? Or is this another case of public apathy? Neverthless, one may conclude that the question of an occupational "image" has little sensational appeal and may really be more an important technical or theoretical question in the minds of professionals which is not necessarily reflected in the general public.

Financing Occupational Education

One question was asked concerning the manner in which occupational education should be financed. The data derived from this question served to add another aspect to the description of the sample population. This question had to do with how occupational education should be financed.

Five of the seven groups of respondents were requested to indicate how occupational education should be financed. Nearly one-half (44%) of the policy makers and 49% of the general public indicated that the county should provide the facility and the state should provide the operating cost (Table II). One-half of the administrative personnel (50%), teachers (47%), and parents (47%) believed that both the facility and operating cost should be provided by the state.

TABLE 11

Means of Financing Occupational Education According to Group

Means	Policy Makers		Administrative Personnel		Teachers		Parents		General Public		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
State provide facility, county provide operation cost	9	7	7	3	20	7	36	13	3	6	75	7.7
County provide facility, state provide operation cost	58	44	95	40	94	33	82	30	23	49	352	36.3
State provide both facility and operation cost	47	35	118	50	132	47	130	48	20	43	447	46.0
Other	15	11	13	6	19	7	11	4	1	2	59	6.1
No response	4	3	3	1	16	6	15	5	0	0	38	3.9
Total	133		236		281		274		47		971	100.0

Overall Response to Questionnaire

As was stated in an earlier section, the questionnaire was constructed from (a) a frequency count of survey literature citing occupational characteristics, (b) similar studies or instruments, and (c) judgment made by professionals in the occupational education field. From each of the above sources one piece of information repeatedly surfaced; there was no in-common concept or construct around which to build an instrument to measure "image." "Image" in the minds of the professionals was as varied as in the minds of the lay public; therefore, the problem became one of determining how to measure an ambiguous concept with any validity. The ambiguity alone enhanced the probability of test error and this, coupled with test item variability, made the data questionable prior to studying "image." In other words, in order to measure a thing accurately, that thing has to have enough characteristics capable of being measured. Can you measure an "image" that is either too diluted (ambiguous) or that barely exists in your subjects? Is there one in-common "image," or should each segment of the population have a different "image?" Finally, should there be a general, or a specific "image," or a combination of the two "images," and should the "image" be fixed or dynamic? These questions were entertained during test construction, data analyses, and report writing.

In terms of the total test for all the people surveyed, the average score was 2.87, which, using a 5-point interval measurement scale from Strongly Agree (SA) 1 point, to Strongly Disagree (SD) 5 points, would categorize all responses in the "uncertain" range. The entire scale was Strongly Agree (SA) 1 point; Agree (A) 2 points; Uncertain (U) 3 points; Disagree (D) 4 points; Strongly Disagree (SD) 5 points; No Response

or unknown (NR) 0 points. (See Appendix B for a copy of the questionnaire.) Caution should be exercised in accepting the 2.87 figure as anything but a gross generalization because of many factors, e.g., the tendency for statistical regression toward the mean to occur.

The above paragraph, and similar statements cited earlier, should not be taken as negative thrusts against either the need for or the quality of the data reported in this study. Once the reader understands from the data that the "image" was ambiguous, then the next step was to measure as many of the "image" characteristics as possible. When the data were broken down a mass of useful information emerged. This information, if properly used, could become the basis for constructing the desired occupational "image." The rudiments of the "image" were revealed and are reported in succeeding sections.

Discussion and Analysis of Individual Statements

The following section includes comments across all districts and subjects for each statement or groups of statements.

Statement 1. Occupational education in high school prepares students for entry-level positions.

Statement 1 was stated in a positive or favorable light for occupational educators. Results of Statement 1 may be seen in Tables 12 and 13 broken down by districts and groups, respectively. The results for Statement 1 showed that generally all subjects across every educational district agreed with this statement (12% SA and 64% A). The greatest disagreement was shown by the policy makers (13%). A chi-square analysis was computed for every question, computing actual response compared to what was expected mathematically for all frequencies. As can be seen in the last column in Tables 12 and 13, no significant

TABLE 12

Means Compared Across Districts by Statements

S	DISTRICTS 1	2	3	4	5	6	7	8	A*	P**
1	2.25	2.20	2.23	2.31	2.30	2.19	2.14	2.23	2.23	ns***
2	3.27	3.69	3.58	3.39	3.29	3.31	3.43	3.43	3.42	.05
3	2.51	2.35	2.39	2.51	2.55	2.42	2.36	2.47	2.44	ns
4	3.72	3.84	3.89	3.83	3.95	3.93	3.95	3.85	3.87	ns
5	3.56	3.71	3.61	3.29	3.50	3.65	3.51	3.53	3.55	ns
6	2.79	2.94	2.95	3.20	3.15	3.06	3.09	2.96	3.02	ns
7	2.99	3.09	3.44	3.19	3.20	3.10	3.14	3.20	3.17	.01
8	3.95	3.71	3.93	3.91	4.01	3.80	3.78	4.01	3.89	ns
9	3.04	3.04	2.86	3.06	2.96	3.06	3.05	3.23	3.04	ns
10	1.91	1.83	1.92	1.95	2.03	2.00	1.96	2.01	1.95	dnc****
11	2.57	2.47	2.27	2.43	2.27	2.30	2.39	2.34	2.38	dnc
12	4.23	4.25	4.24	4.26	4.30	4.25	4.22	4.34	4.26	ns
13	2.48	2.62	2.65	3.06	2.76	2.90	2.88	2.88	2.78	.05
14	4.00	4.05	4.05	3.80	3.95	4.04	3.95	3.94	3.97	ns
15	4.09	4.03	3.99	4.05	4.05	4.07	4.05	4.08	4.05	ns
16	3.38	3.01	3.29	3.26	3.35	3.04	2.96	3.39	3.21	.01
17	2.81	2.71	2.89	2.80	2.86	2.71	2.57	2.81	2.77	.05
18	3.70	3.86	3.76	3.76	3.79	3.88	4.03	3.86	3.83	ns
19	3.41	3.56	3.40	3.30	3.47	3.46	3.62	3.51	3.47	ns

* Average of means across districts
** Level of significance
*** Not significant
**** Did not compute

(Table continued on nest page)

TABLE 12 (Continued)

S	DISTRICTS 1	2	3	4	5	6	7	8	A	P
20	2.69	2.59	2.70	3.11	2.82	2.77	2.95	2.90	2.82	.01
21	2.18	2.32	2.24	2.22	2.25	2.11	2.35	2.28	2.24	ns
22	3.89	3.97	3.92	3.80	3.77	3.87	3.89	3.86	3.87	ns
23	2.37	2.20	2.19	2.44	2.32	2.33	2.12	2.21	2.27	.01
24	2.51	2.47	2.63	2.65	2.68	2.41	2.47	2.66	2.56	ns
25	2.26	2.29	2.44	2.56	2.69	2.38	2.38	2.44	2.43	.05
26	3.54	3.70	3.58	3.36	3.57	3.64	3.76	3.66	3.60	ns
27	2.24	2.10	2.17	2.28	2.36	2.25	2.31	2.29	2.25	ns
28	1.88	1.91	1.86	1.94	1.91	1.83	1.93	1.87	1.89	ns
29	4.15	4.29	4.08	3.94	4.01	3.96	4.09	4.15	4.08	.05
30	2.33	2.14	2.31	2.20	2.33	2.16	2.16	2.37	2.25	.01
31	3.09	3.23	3.03	2.94	3.05	3.13	3.13	2.99	3.08	ns
32	2.13	1.99	2.03	2.05	2.21	2.07	2.02	2.10	2.07	ns
33	2.05	2.15	2.18	2.25	2.18	2.48	2.12	2.15	2.19	.01
34	2.13	2.12	1.97	2.06	2.19	2.11	1.97	2.14	2.09	ns
35	2.57	2.36	2.50	2.49	2.43	2.69	2.37	2.57	2.50	ns
36	2.83	3.12	2.96	2.97	2.94	3.01	3.16	2.97	2.99	ns
37	2.76	2.64	2.63	2.61	2.55	2.87	2.83	2.84	2.72	ns
38	3.13	3.07	2.99	2.99	2.80	3.14	3.04	3.18	3.04	ns
39	2.22	2.06	2.17	2.24	2.24	2.26	2.29	2.19	2.21	ns
40	3.15	2.93	3.10	3.06	3.23	3.11	3.04	3.05	3.08	ns
41	4.38	4.20	4.38	4.30	4.45	4.30	4.40	4.37	4.35	ns

(Table continued on next page)

TABLE 12 (Continued)

S	DISTRICTS 1	2	3	4	5	6	7	8	A	P
42	4.07	3.99	4.03	4.10	4.11	3.87	3.98	4.16	4.04	ns
43	2.66	2.86	2.69	2.80	2.68	2.67	2.67	2.86	2.74	ns
44	2.52	2.46	2.19	2.35	2.38	2.50	2.50	2.44	2.42	ns
45	3.43	3.47	3.36	3.25	3.52	3.60	3.44	3.39	3.43	ns
46	2.42	2.63	2.44	2.25	2.32	2.33	2.51	2.45	2.42	ns
47	2.24	2.07	2.31	2.19	2.41	2.17	2.26	2.16	2.23	ns
48	2.43	2.13	2.09	2.36	2.25	2.00	2.08	2.18	2.19	.01
49	2.43	2.05	2.39	2.44	2.44	2.19	2.33	2.36	2.33	.05
50	1.92	1.80	2.15	2.01	2.06	2.00	1.91	2.15	2.00	.05
51	2.07	1.99	2.13	2.22	2.10	2.26	2.11	2.18	2.13	ns
52	2.11	1.96	2.09	2.07	1.98	2.07	1.99	2.03	2.04	ns
53	2.17	2.06	2.13	2.18	2.11	2.24	2.11	2.20	2.15	ns

TABLE 13

Means Compared Across Groups by Statements

S	GROUPS 1	2	3	4	5	6	7	A*	P**
1	2.30	2.31	2.25	2.19	2.09	2.33	2.18	2.24	ns***
2	3.80	3.47	3.37	3.35	3.28	3.47	3.73	3.49	.001
3	2.47	2.61	2.32	2.42	2.34	2.69	2.45	2.47	.01
4	3.71	3.93	4.00	3.74	3.97	3.69	3.55	3.80	.001
5	3.40	3.57	3.56	3.58	3.51	3.53	3.72	3.55	ns
6	2.97	2.96	2.89	3.07	3.12	3.09	3.05	3.02	.001
7	3.49	3.31	3.36	2.97	2.77	3.45	3.35	3.24	.001
8	3.59	3.92	4.28	3.73	3.97	3.43	3.31	3.75	.001
9	2.78	2.97	2.87	3.22	3.33	2.76	2.82	2.96	.001
10	2.00	2.09	1.89	1.91	1.85	2.06	1.93	1.96	.01
11	2.21	2.43	2.46	2.37	2.40	2.39	2.33	2.37	.05
12	4.37	4.32	4.42	4.11	4.20	4.10	4.27	4.25	.001
13	2.94	2.43	2.65	2.93	2.88	2.96	2.81	2.80	.001
14	3.53	4.05	4.22	3.88	4.19	3.37	3.66	3.84	.001
15	3.89	4.13	4.06	3.95	4.31	3.60	3.96	3.99	.001
16	3.44	3.30	3.41	3.13	2.90	3.37	2.98	3.22	.001
17	2.90	2.70	2.78	2.72	2.67	3.06	2.82	2.81	.01
18	3.83	4.26	3.97	3.63	3.68	3.43	3.58	3.77	.001
19	3.34	3.65	3.65	3.37	3.42	3.25	3.23	3.42	.001

* Average of means across groups
** Level of significance
*** Not significant

(Table continued on next page)

TABLE 13 (Continued)

S	GROUPS 1	2	3	4	5	6	7	A	P
20	2.89	2.57	2.72	2.87	2.98	3.08	2.84	2.85	.001
21	2.05	2.27	2.16	2.34	2.43	2.12	2.14	2.21	ns
22	3.77	3.84	3.96	3.89	3.97	3.53	3.74	3.81	ns
23	2.35	2.21	2.16	2.23	2.26	2.57	2.32	2.30	ns
24	2.78	2.67	2.61	2.44	2.36	2.74	2.64	2.61	.01
25	2.60	2.52	2.37	2.36	2.22	2.90	2.40	2.48	.001
26	3.27	3.72	3.65	3.58	3.90	3.05	3.14	3.47	.001
27	2.16	2.24	2.22	2.23	2.37	2.22	2.18	2.23	ns
28	1.76	2.00	1.81	1.83	1.99	1.96	1.93	1.90	ns
29	3.95	3.89	4.06	4.22	4.42	3.72	3.93	4.03	.001
30	2.12	2.20	2.23	2.29	2.30	2.37	2.27	2.25	.05
31	3.10	3.35	3.06	3.00	2.94	2.93	3.18	3.08	.001
32	2.14	2.13	2.04	2.05	1.97	2.30	2.14	2.11	ns
33	2.23	2.19	2.17	2.16	2.11	2.43	1.93	2.17	ns
34	1.86	1.99	1.91	2.23	2.31	2.08	2.04	2.06	.001
35	2.35	2.25	2.52	2.57	2.74	2.37	2.14	2.42	.001
36	2.72	2.66	2.94	3.18	3.50	2.73	2.71	2.92	.001
37	2.50	2.28	2.43	3.08	3.18	2.46	2.80	2.68	.001
38	2.71	2.92	2.83	3.28	3.48	2.52	2.80	2.94	.001
39	2.23	2.18	2.12	2.23	2.21	2.45	2.27	2.24	.01
40	3.37	3.39	3.12	2.99	2.54	3.52	3.35	3.18	.001
41	4.47	4.50	4.51	4.17	4.13	4.42	4.53	4.39	.001

(Table continued on next page)

TABLE 13 (continued)

S	GROUPS 1	2	3	4	5	6	7	A	P
42	4.03	4.20	4.14	3.96	3.99	3.81	4.07	4.03	.05
43	2.57	2.58	2.61	2.95	2.93	2.57	2.98	2.74	.001
44	2.12	2.20	2.33	2.71	2.66	2.25	2.37	2.38	.001
45	3.54	3.50	3.42	3.38	3.32	3.56	3.45	3.45	ns
46	2.09	1.85	2.18	2.75	3.12	2.28	2.30	2.37	.001
47	2.45	2.48	2.09	2.11	2.06	2.47	2.34	2.29	.001
48	2.35	1.94	2.06	2.25	2.28	2.44	2.53	2.27	.001
49	2.68	2.27	2.38	2.23	2.08	2.76	2.72	2.45	.001
50	2.23	1.99	1.94	1.94	1.84	2.40	2.13	2.06	.001
51	2.42	2.21	2.07	2.01	1.90	2.50	2.34	2.21	.001
52	2.29	1.94	2.04	1.96	1.84	2.52	2.38	2.14	.001
53	2.47	1.83	2.07	2.23	2.05	2.60	2.34	2.23	.001

differences were found across groups or districts. An additional analysis, testing for racial difference, revealed that both Blacks and Whites scored the statement similarily.

One may conclude from Statement 1 data that occupational education in high school does prepare students for entry-level positions, at least in the minds of the respondents. Additional research is needed to find out if in fact occupational education does prepare students for entry-level positions or whether this preparation is desired.

Statement 2. Occupational education programs in schools do not attract new industries to an area.

Stated in a negative fashion, this statement produced predominately negative responses for all groups across all districts. In some peculiar fashion the subjects viewed occupational education programs as attracting new industry; however, there was a great deal of uncertainty about this statement. A closer examination of the data revealed that parents and students agreed with the statement, whereas policy makers, business and industry, and the general public showed a greater percentage of disagreement.

When a comparison across districts was made, significant district differences ($\chi^2 = 47.61$, $P < .05$) were found. Districts 5, 6, and 7, the piedmont-industrial area, showed greater agreement with the question while districts 2, 3, and 8, the rural areas, showed greater disagreement.

When race was inserted as the manipulated variable, no racial differences were found in Statement 2 responses.

Generally, responses to Statement 2 showed that all respondents, by districts, thought that occupational education programs attract new

industry into an area. There were some significant differences by groups and by districts as to the certainty of this statement. Again, one might pose the research question as to which should come first, program or industry. The response to this statement seemed to add to "image" ambiguity.

Statement 3. Occupational education programs adapt to the changing needs of the local manpower market.

Statement 3 was an interesting combination of factors inherent in what the manpower market is, what the manpower market demands or needs, and what rate of manpower change is present in our society. Further, one could assume from a very positive respondent agreement with this statement that occupational education programs should follow the dictate of manpower needs. Theoretically, if this were the case, one might speculate that the supply of trained manpower would never catch up with the "changing" demand for manpower. If occupational education programs follow the manpower needs, as opposed to anticipating the needs, the "image" will always represent the change phenomena of manpower since ever increasing change is a fact of life. All of this should suggest to occupational education policy makers that occupational programs should anticipate needs and be dynamic.

Having admitted to the above prejudice, a close look at the data supported the statement that programs do adapt to the changing needs of the local manpower market. Sixty-six percent of all groups and districts either agreed or strongly agreed with statement 3. Nineteen percent of all groups were uncertain while only 15% disagreed. Professional operators (64%) and students (63%) agreed most with the idea while business and industry (45%) agreed less. Almost one-half

of business and industry respondents were either uncertain or they disagreed. When this statement was compared across districts, Districts 1 and 5 rated less agreement and Districts 2, 6, and 7 rated more percentage agreement.

In terms of race, all races agreed or strongly agreed with this item, but there was a 6% and 15% agreement differential between Blacks and American Indians, respectively, when compared with Whites.

Statement 4. Occupational education teachers do not help students find jobs.

Approximately 78% of all groups across all districts disagreed with this statement. A rather large (23%) "strongly disagree" rating was recorded for this statement with little uncertainty being evidenced (11%). It was interesting to note that both students and the general public, on the average, scored 10 percentage points below most of the other groups, indicating in the case of the general public uncertainty or agreement while indicating the opposite (SD) in the case of students.

Data for the districts followed data for the groups with no significant variations from expected.

Finally, when race was manipulated, Blacks showed less agreement and more uncertainty than did Whites or American Indians.

In the minds of the respondents teachers were playing a very vital and needed role in helping students find jobs. This certainly should be included as a part of the image of occupational education.

Statement 5. Occupational education programs do not provide job opportunities for handicapped individuals.

The residents of North Carolina thought that the state vocational programs do provide help for the handicapped. All groups across all districts, including all races, disagreed with the statement (62%).

Statement 6. Occupational awareness activities are provided for students in the elementary grades.

Statement 13. Junior high school programs focus on occupational orientation.

Statement 20. Career exploration activities are provided for students in grades 7-9.

Since these statements dealt with occupational training in our public schools, they will be discussed together. All of the statements are framed in a positive vein; therefore, commonality in the rating was expected. Statements 6, 13, and 20 generated a great deal of ambiguous data. Confusion was apparently inherent in all three statements. For Statement 6 there was almost as much uncertainty or disagreement as there was agreement for groups, districts and races. Policy makers, administrators, and professional operators all demonstrated a higher level of agreement than did parents, students, business and industry, or the general public (Tables 12 and 13). The latter groups ironically showed a lower level of disagreement with a very high degree of uncertainty.

The data showed no clear-cut distinctions among districts, but Whites showed more disagreement (37%) and more uncertainty (24%) than did Blacks or American Indians.

For Statement 13 there was more agreement (49%) across groups and districts. Racial analyses also showed that the races as a whole agreed that junior high schools should focus on occupational orientation.

Statement 20 followed an identical pattern with Statement 13 and a similar pattern with Statement 6. One may generalize from the findings that the users of career information are either unsure of the career education programs, or quite possibly some of the users may be against this concept, especially in the early grades since the data for the earlier grades showed more variability coupled with more uncertainty. This raises an interesting theoretical question as to whether the occupational education profession has planned a career education package that the residents of North Carolina disagree with or are uncertain about for the early grades. Or could the problem be merely an information gap?

Statement 7. Occupational education programs prepare students to enter college.

This statement turned out to be one of the more interesting statements in terms of analyses. Policy makers, administrators, professional operators, business and industry, and the general public (approximately 60%) disagreed with the statement that occupation programs prepare students to go to college. Parents and students, however, differed significantly (43% and 52%, $P < .001$), stating that this training does prepare students for college. Generalizations drawn from this data are that either parents and students desire to go on to colleges, that programs are desired with the option of going to college, or that such vocational programs are misunderstood in terms of terminal goals.

When compared across races Whites generally disagreed (50%) while Blacks disagreed at a lower percentage rate (42%). The American Indian, in contrast, showed 58% agreement.

Data from Statement 7 suggested that occupational education programs do not include as a goal preparing students for college. This was in disagreement with the feelings of students, parents, and American Indians. Again, the"image"is confused concerning program goals.

Statement 8. Occupational education teachers require less education than do teachers of academic courses.

The responses to Statement 8 were as expected; all except one group disagreed (70-80%). The general public surprisingly showed 49% disagreement and 36% agreement with this statement. The rating suggested that the general public more than any other group had an "image" that there are lower requirements for occupational teachers. The rating reflects the public"image"and suggested that this negative image might be changing, possibly improving. Continued time-series research studies could answer questions of this sort and should be undertaken.

Neither district nor racial differences were found in the way in which the general public responded to the statement. This suggested a common problem of "image"with the general public which is not restricted by other factors.

Statement 9. Scholastically able students are discouraged from entering occupational education programs.

Statement 38. High school students planning to go to college do not take occupational education courses.

Statements 9 and 38 were worded to measure attitudes behind the basic idea that the better qualified or brighter student does not take occupational courses, but instead takes college preparatory courses.

Policy makers (52%), administrators (49%), professional operators (49%), business and industry (46%), and the general public (53%) agreed

with the idea that scholastically able students are discouraged from entering occupational programs. Parents (52%) and students (59%) disagreed.

When the statement was worded another way, probing whether high school students who go to college do not take occupational courses, the results were similar. Policy makers (58%), administrators (59%), professional operators (50%), business and industry (58%), and the general public (56%) again saw this status-loaded statement significantly different from the parents (56% D) and students (62% D). Two dichotomous generalizations come to mind. First, it is possible that strong disagreement with this statement by students and parents may signify an acceptance of occupational programs as equal in status with college preparatory programs. Second, students and parents could be responding defensively, and, if so, coupled with the overwhelming agreement of all other respondents in the sample, one would conclude that the overall "image" in terms of the "good student" is generally negative. If this is the "image" in North Carolinians' minds, it will have to be changed in order to sell the public on the quality of vocational or career training.

In response to Statement 9, Blacks, Whites, and American Indians disagreed. Whites generally disagreed less with this statement, again supporting the negative status-image of the vocational path. Statement 38 data replicated, almost identically, the response given to Statement 9.

Statement 10. Occupational education training develops within students a sense of dignity and pride in their jobs.

Statement 14. Occupational education programs do not emphasize attitudes and work habits which are necessary for successful employment.

Statement 22. Occupational education fails to make students aware of their own potential.

Statement 32. Occupational education programs develop attitudes and work habits which lead to personal fulfillment.

These four statements were placed together for discussion pruposes since each dealt with attitudes, pride, and work habits. For Statement 10, very strong agreement (84-96%) was reported by all groups across all districts, with the general public being the most affirmative. Statement 14 was stated negatively. It tested respondents' beliefs about attitudes and work habits of the vocational student. All groups disagreed with this statement (52-88%); however, three groups, policy makers (65% D), general public (65% D), and business and industry (52% D) differed from the other groups. The business and industry group and the policy makers group showed a high percentage (26% and 25%) of uncertainty. Although the American work ethic is still greatly admired in this state, there is a question as to whether occupational education programs are imparting the importance of attitudes and work habits to their students.

The data trend found in Statement 22 was similar to that in Statement 14. Scores ranged from 67% D to 84% D. Again business and industry (67% D), general public (75% D), and policy makers (76% D) disagreed with the statement, thus concurring that occupational programs produce students aware of their own potential. Data compared across districts showed no deviations, thus indicating a statewide position on these series of statements.

Statement 32 was a reciprocal statement for Statement 14, the difference being a positive "image" probe concerning attitudes and work habits leading to personal fulfillment. Data strongly supported the concept that occupational programs develop work habits and attitudes that lead to personal fulfillment, thus confirming Statement 14. Again, it is worth pointing out that business and industry, general public, and policy makers scored an average of 8 to 10 percentage points lower than other groups.

When the racial variable was manipulated and tested, no differences were recorded. All peoples of North Carolina saw the above concepts alike.

Statement 11. Industry cooperates in the planning of occupational education programs.

Statement 31. Local citizens are not involved in planning occupational education programs.

Statements 11 and 31 sought to determine the role that industry and local citizens assumed in planning occupational education programs. The majority of respondents "agreed" (67-80%) that industry cooperated in planning programs but the role of local citizens was fraught with confusion. Only administrators viewed strong disagreement (60%) regarding local citizens' role in program planning. All other groups registered a great deal of uncertainty with an approximately even split between agreement and disagreement.

There were no distinguishable trends across districts although District 2 scores were slightly different from those of the other groups. Blacks, Whites, and American Indians again spoke as a unit with no differences evidenced.

A conclusion may be drawn from these responses indicating that

the public of North Carolina thinks that vocational programs are planned by program administrators and business and industry, but are confused as to the role of the local citizen.

Statement 12. Occupational education programs are too costly in terms of money, time and effort.

The citizens of North Carolina, regardless of what race, which group, and what location, disagreed with this statement (76-86%). One might conclude that occupational programs are desired at the current level with the possibility that more funds and bigger programs would meet with the public's approval.

Statement 15. Occupational education programs are primarily for students from low income families.

Statement 42. Occupational education programs are useful primarily to students of low intelligence.

It may be assumed that part of the occupational education "image" centers around a recognized prejudice toward people from low socio-economic strata. Therefore, statements 15 and 42 were included in the questionnaire, each intended to investigate slightly different aspects of what might be negative components of an "image."

Statement 15 explored attitudes relating low socioeconomic levels to occupational programs. Data showed that without exception all groups, districts, and races sampled disagreed with the negative"image." Apparently the subjects in this study, speaking for North Carolinians, believe strongly that occupational training is for all socioeconomic levels. One point is worthy of attention concerning responses to Statement 15. Business and industry, the recipients of occupation program efforts, scored on the average 10 to 15 percentage points lower

on their disagreement than any of the remaining groups. Policy makers scored next lowest. The point became even more pertinent concerning business and industry attitudes when data examination showed that 4% strongly agreed with this statement while 17% scored agreement. Twenty-one percent of North Carolina business and industry leaders thought that occupational programs should be for the low income families. The reader is cautioned against accepting such a conclusion without further research.

Whites and Blacks scored 86 and 85% disagreement while American Indians scored slightly less disagreement (79%). Regardless of where this question was asked across the state, the result was from 82 to 89% disagreement. Districts 3 (82%) and 2 (83%) disagreed less than did the other educational districts.

When Statement 42 focused on the negative "image" component of low intelligence rather than low income, the response was again a resounding disagreement (77 to 91%). As was true with Statement 15, business and industry showed 1% strongly agree, 16% agree, and 6% uncertainty, thus demonstrating the same trend discussed in reaction to Statement 15. There was one striking additional finding in the data from Statement 42; students also showed a split with 78% disagreeing, 2% strongly agreeing, 14% agreeing, and 6% uncertain. In this case approximately one-fifth of the students and business and industry personnel seemed to question whether or not occupational education should be only for low intelligence students.

Districts across North Carolina showed strong disagreement, with the heavily industrialized 6th District (Charlotte) demonstrating less (76%) disagreement. Racial differences to Statement 42 contained a

surprise finding. There was generally strong disagreement to this statement, but Blacks in the study disagreed less (79% compared to 82 and 86%) than did the other two racial groups. A generalization from the data analysis might be that a small percentage of Blacks view occupational programs primarily for the low-intelligence student.

Statement 16. The occupational education programs in my county are varied enough to serve the needs of all students.

This statement produced an overall general split in responses. Policy makers, administrators, and professional operators disagreed with the statement (60, 55, 54%) while the students group showed 50% agreement. The remaining groups were split between agreement, uncertainty, and disagreement. No conclusion can be drawn from the results of this query across groups, across districts (more disagreement here than agreement), or across races.

Statement 17. Occupational education at the high school level provides training in a broad cluster (wide variety) of occupational areas.

Statement 23. At the high school level, occupational education provides training for specific skills.

Statement 24. Occupational education programs in high school prepare students for a wide range of job opportunities.

A thorough review of occupational education literature revealed a theoretical controversy which the researchers in this study thought accounted for some vocational programs' ambiguity and produced confusion in the students' "image" of what such programs ought to do. Should the goal of occupational programs be to train students for specific skills or for a wide range (clusters) of job opportunities? An accompanying question is, "Who should make these decisions?"

Consolidated answers to Statements 17, 23, and 24 showed a major source of confusion concerning the controversy of specific versus general (wide-range or clusters) job training in high school. The confusion centered around general agreement with all three statements across all groups, districts, and races. In other words, respondents agreed with both specific and cluster approaches in occupational education. These results indicate either confusion about occupational program goals in all groups'"images"or possibly a desire for program flexibility. Closer inspection of the data showed that Statement 23, concerning training for specific skills, was more strongly agreed with (79%) than was the cluster concept (Statement 17, 56%). The public seemed to be more (greater percentage responded) in favor of specific skills training. Again, business and industry showed more uncertainty as to their "image" concerning these concepts.

At this point enough data have been analyzed and discussed concerning business and industry to speculate that this group might be uncertain of either the "image" or role of occupational education programs.

Without doubt greater effort needs to be exercised to close the knowledge-communication-concern gap between business and industry on the one hand and the planners and implementers of occupational education programs on the other.

Statement 18. School administrators do not support occupational education programs.

Statement 35. Occupational education programs are supported by the general public.

Program support is a vital part of program success. Statements 18 and 35 explored two parts of program support, the school administrator

and general public. A wide range of disagreement (55 to 91%) was reported for the support of school administrators. Administrators scored a resounding 91% rating, significantly higher than any of the other groups (total percent averaged 74% disagreement). Business and industry and the general public showed less disagreement with this statement. The education districts variable showed no differences in disagreement, but Blacks (68%) disagreed less than did Whites (75%) or American Indians (77%). No group accepted the notion that school administrators did not support occupational education programs, but all groups saw support level lower than did administrators.

When asked about what support the general public gives occupational programs, only students (45%) closely followed by parents (56%) and professional operators (59%) questioned or disagreed with the amount of public support. Students did not believe that the public supports occupational programs. The general public responded (81% agreement) like the school administrators did in Statement 18. The general public sees itself as strongly supporting such programs. These apparent contradictions in "image" concerning support should vividly point out the ambiquity of not only the "image" of occupational education, but of an understanding of the overall goals of the occupational education endeavor.

Blacks (48%) did not agree that the general public supports occupational education programs. The American Indian was caught between agreement (50%) and uncertainty (29%) while the Whites agreed (64%) that public support is given.

Statement 19. Most high school students are being trained for irrelevant occupations.

Statement 25. Occupational education programs take into account future needs of society.

Statement 40. Occupational education programs are meeting the manpower needs of society.

For Statement 19 all groups except the general public disagreed (52 to 71%) that students are being trained for irrelevant occupations. Business and industry (52%), students (53%), and parents (54%) were skeptical in their disagreement with 20 to 28% uncertainty.

In the statement concerning occupational education programs accounting for future needs of society, business and industry showed significant ($\chi^2 = 75.06$, $P < .001$) uncertainty and disagreement. Policy makers showed slight agreement (58%). Again, these results confirm that occupational education programs are questioned by business and industry respondents regarding future societal needs. Occupational education programs apparently have a serious problem with the attitudes of business and industry leaders.

No valid conclusion can be drawn from Statement 40 concerning meeting the manpower needs of society. Significant variations ($\chi^2 = 144.85$, $P < .001$) in response across groups (57%) were the only group to agree while the general public (56%), business and industry (57%), and administrators (51%) disagreed. Parents and professional operators were evenly split between agreement, disagreement, and uncertainty. One can only conclude that the majority of groups disagreed that occupational education programs are meeting the manpower needs of society.

One can conclude that relevance and needs of society (manpower) are ever increasing and that the image of occupational programs reflect

this change phenomena. Only systematic planning, implementation, and communication can replace the confused occupational education "image" with a distinct, clear "image." The price for this will be high both in manpower efforts and state funds.

Statement 21. Some social ills--underemployment and rising crime rate among youth--indicate a lack of occupational education programs for those who need them most.

Statement 34. Occupational education programs reduce the dropout rate in the public schools.

Statement 27. Occupational education programs provide opportunities for the disadvantaged.

This cluster of statements explored the belief in society of the occupational education programs' beneficial efforts in solving problems related to social ills, poverty (disadvantaged), and school dropouts. Responses to all three statements were in firm agreement (70 to 80%) with the exception of those of students. Most students did agree with the positive effects of occupational programs, but showed some skepticism.

There was general agreement for these three statements across districts and races. Blacks, although agreeing, showed a few percentage points difference (lower agreement) than did Whites and American Indians.

One might conclude from these statements that the citizens of North Carolina view occupational education programs as having potential to help solve societal problems. This may be a reflection of the Protestant Work Ethic related to idle hands. This may be a somewhat idealistic response especially when compared to the negative responses concerning the ability of occupational education to project manpower

or societal needs. Personal needs of the dropout, the young criminal, or the disadvantaged are more complex and difficult to project than industrial needs; therefore, a critical reviewer will question the above apparent discrepancy. Nevertheless, occupational educators would do well to capitalize on the positive "image" of their programs for curing social ills.

Statement 26. Preparing students for careers receives little attention at the high school level.

With the exception of business and industry and the general public, all groups disagreed with the above statement and demonstrated their belief that high school does focus upon career training. There were no significant racial or district differences.

Statement 28. Not enough information is available to the public about occupational education programs.

According to the responses for all groups, all educational districts, and all races in this study, a "fact" can be stated. This fact is: not enough information is available to the public about occupational education programs. There was in all situations a firm 90% agreement with this statement. Added emphasis was found in responses to this statement to which 25-30% of the subjects responded in the strongly agree category. This percentage of strongly agree ratings was among the highest ratings for any statement in this study. The result of this statement and other similar statements definitely showed that there is a communication gap in North Carolina concerning occupational education programs.

Statement 29. Occupational education is designed for somebody else's children, not mine.

Statement 43. Occupational education is not held in high esteem by many students and educators.

Statement 41. A college degree guarantees success in our society.

Self-image, self-esteem, positive self-concept, and personal success are complex psychological constructs. In a society in which the youth are verbally questioning materialism, where security is related to a rapidly changing job market, where mechanism and technology are replacing craftsmanship, and where male and female roles are becoming blurred, personal worth, success, and positive self-image are becoming more vital. Before occupational education programs are accepted on a par with college education, the public must be convinced that the value of a vocational graduate approximates the value of a college graduate. This is a complex problem, not lightly stated; it may rest at the root of the poor and confused "image" of occupational education.

Responses to Statement 29 showed that all groups, districts, and races disagreed with this statement. Students and parents disagreed strongly with this statement. While analyzing student responses to this statement, one should keep in mind that the majority of students in this study were in occupational programs. Whether similar results would have been recorded for parents of students going to college was not investigated.

When queried about the esteem of occupational education, all groups except the general public (49%), students (43%), and parents (42%) agreed with the statement that occupational education is not held in high esteem by students and educators. Whites were the only racial group to agree (55%), while Blacks and American Indians registered some

agreement, some uncertainty, and some disagreement. In every case disagreement with the statement was low. There also was no difference across the educational districts.

Statement 41 received the largest percentage (40-58%) of "strongly disagree" responses recorded in the questionnaire. It is obvious that some of the general public's romance with college has lost its lustre. All groups, races, and districts disagreed that college guarantees success in our society. Although students and their parents disagreed strongly, they disagreed on an average of 10 to 12% points less than other groups. In fact, 12% of the students and 8% of the parents thought that a college degree does guarantee success. Blacks disagreed, but disagreed less than did either Indians or Whites.

Overall, the image of occupational education may be improving in North Carolina. One cannot be certain without repeated or yearly measures.

Statement 30. At the community college level, students are prepared to enter specific occupations.

Statement 33. Occupational education programs prepare students for entry into technical institutes.

Statement 36. Occupational education programs in the public schools, community colleges, and technical institutes are not coordinated.

All respondents regardless of race or location in North Carolina agreed that (a) community colleges prepare students for jobs and (b) that high school occupational programs serve as vehicles for entry into technical schools or community colleges. Policy makers (52%) and administrators (56%) agreed that there is little coordination among public schools, community colleges, and technical institutes. Students

(58%) disagreed with this statement. The remaining groups were split between agreement, disagreement, and uncertainty.

Statement 37. In high schools there is too much emphasis on preparing students for college.

Statement 44. Current educational practices clearly favor those who are academically oriented.

Statements 37 and 44 questioned the role of academic (college) preparation in high school. Students were the only group in which a majority disagreed (54%) with the idea that too much emphasis is placed upon preparing students for college; parents were close with 48% disagreement. In general, all groups, races, and districts scored slightly more than 50% agreement, which was confusing in light of other questions concerning college in this survey.

When polled about public educational practice favoring the academically oriented, all groups and races rated agreement. Parents (51%) and students (50%) agreed, but agreed less than other groups. It appeared either that the occupational students' "image" is improving or strong defense mechanisms are being adopted.

Statement 39. Occupational education programs are concerned about the needs of the individual student.

Statement 45. Occupational education programs are concerned primarily with the needs of the employer.

There was agreement that occupational education programs are concerned about the need of individual students across all groups, races, and districts. The concept was further confirmed by all groups, districts, and races disagreeing with Statement 45.

One can conclude that the student is the focal point of occupational education and that this is the place where the public thinks

needs should be met.

Statement 46. Guidance services are inadequate for students in the public schools.

Without a doubt guidance services are believed to be inadequate by all groups except students (51% D). Blacks showed more uncertainty and disagreement with this statement than they did agreement. Guidance services may be considered frills in some school programs, but this may not coincide with most North Carolinians' opinions. It was felt that guidance services are needed, especially with vocational programs.

Areas of Occupational Education

On the last page of the questionnaire, respondents were asked to rate their image of the areas of occupational education. Generally speaking, agriculture education, distributive education, health occupations, consumer and homemaking education, occupational home economics, vocational office education, and trade and industrial education were all rated as having a good "image" (for a more detailed analysis, see Tables 12 and 13, questions 47-53).

Part B of this question asked for written comments about the respondent's attitude toward any or all of the areas of occupational education (Appendix G). There was no planned system for tabulating these comments since an exhaustive, mutually exclusive, and meaningful categorization system would have been impossible to develop. The data from these comments, however, were subjectively analyzed by making rough judgments, where possible, as to whether the comments were essentially positive or negative regarding occupational education. The data are summarized in Table 14.

Teachers, parents, and students, the three largest groups of

TABLE 14

Categorization of Respondents' Comments by Groups

Groups	Positive	Neutral	Negative	Total
Policy Makers	29 (39)*	21 (28)	25 (33)	75
Administrative Personnel	46 (38)	38 (31)	38 (31)	122
Teachers	69 (34)	94 (37)	39 (19)	202
Parents	107 (55)	48 (25)	38 (20)	193
Students	103 (42)	118 (48)	24 (10)	245
Business and Industry	7 (16)	17 (40)	19 (44)	43
General Public	4 (16)	14 (56)	7 (28)	25
Total	365 (40)	350 (39)	190 (21)	905

* Figures in parentheses are percentages.

respondents, generally were positive in their comments (64%, 74%, and 81% respectively). Over one-half of the comments of policy makers (57%) and administrative personnel (55%) were positive. The two smallest groups of respondents, business and industry and general public, were quite negative.

Even though nearly one-half of the comments could not be rated because they were neutral, certain themes tended to emerge from some of the groups. Administrative personnel, for example, frequently indicated that the success of a particular program was directly related to the quality of the individual teacher for that program. Another theme which emerged across most all groups was expressed in a juxtaposition of occupational education with college preparatory education. The idea that the one is as valuable as the other was expressed nearly as often as the idea that occupational education is really an alternative to college education.

To the question, "Do you know the kinds of occupations for which students can be trained in each of the specific areas of occupational education at the high school level?" a majority of subjects responded "yes" (see Table 15).

From the data in Table 15, vocational office education was shown to be the best known while trade and industrial education, agriculture education, and occupational home economics followed closely. The areas of health occupations and distributive education were the least recognized. Data in Table 15 cut across all educational districts, races, and groups.

TABLE

Yes-No Responses to Kinds of Occupations

Kinds of Occupations	Yes	No	NR	Total
Agriculture Education	958	377	8	1343
Distributive Education	846	491	6	1343
Health Occupations	812	525	6	1343
Occupational Home Economics	973	364	6	1343
Vocational Office Education	1016	321	6	1343
Trade and Industrial Education	934	403	6	1343

Basic Data Unit

The results in the preceeding sections repeatedly confirmed a basic fact, that the "image" of occupational education programs is confused. There are several means a researcher might take to further explore and elucidate the "image." A major way would be to apply a time-series design across the next five years. In this design data similar to that gathered for this study would be collected across five years. In some instances repeated measures on the same subject accompanied by equivalent surveys of groups, districts, and races would need to be drawn. Data then could be compared across the five year span to see what were lasting and what were changing parts of the "image." Data for the current study were collected with this possibility in mind.

Since all data were punched on computer cards, the basic data unit was the individual responding to all questions. Data in this situation were useful, but somewhat limited for comparisons. Therefore,

the basic data cell or unit was compiled by groups-by-district for each statement. Appendix H contains figures which depict this basic data unit.

No written discussion will accompany this section since an elaborate groups-by-districts-by-race write-up can be seen in a previous section. Several recommendations will be made, however, regarding use of data in this section, and these recommendations are as follows:

1. Data by districts and groups should be sent to district level occupational education program administrators.

2. Data by districts and groups should be collected yearly as a feedback monitor for the State's occupational education programs.

3. Data by districts and groups should be broken down into counties by rerunning the computer cards and the results given to policy makers, administrators, and professional operators.

4. Data from this study and other similar studies should be compiled into a data bank for the state. A groups-by-county basic data cell would be the most appropriate for such a data storage program.

Interviews

As earlier indicated, 56 persons were interviewed individually. One person from each of the seven groups in each of the eight (8) districts who had not participated in the written survey was interviewed. Although the interviews were not highly structured, the same ten questions were asked by the interviewers.

Statement 1. Occupational education in high school prepares students for entry-level positions.

Although most of the sample agreed with this statement, it was usually qualified in terms of the kind of program. That is, some programs were well structured for this purpose, but others really

provided beginning competence for more specialized training.

Statement 2. Occupational education programs adapt to the changing needs of the local manpower market.

Several respondents expressed the opinion that they did not see how the programs could adapt to manpower needs since the needs change faster than the educational system can find either money or skills to change the program. A recurring theme was that the major limiting factor was lack of adequate funds for effective change. Although not stated explicitly, the implication was that the programs do indeed change but neither rapidly nor efficently enough.

Statement 3. Industry cooperates in the planning of occupational education programs.

The responses to this question varied a great deal regionally, which in turn related to the amount of industry in a given area. Many of the subjects felt that industry plays a large part in the programs when given an opportunity, but some doubted that the attempt is often made to involve industry. Several persons disagreed with the statement on the basis that they believed industry cooperates in the operation of programs, but is not really involved in the actual planning of programs.

Statement 4. Occupational awareness activities are provided for students in the elementary grades.

There was a wide variety of interpretation of "occupational awareness activities" on the part of the subjects. Some thought that this depended to a great extent on the individual teacher. Others said that such activites were just being developed. One person said that

he felt very strongly that elementary school was not the place for such activities, that instead basic skills should be emphasized. Overall, opinion was divided as to whether or not such activities should be included in the elementary curriculum.

Statement 5. The occupational education programs in my county are varied enough to serve the needs of all students.

Respondents who agreed with this statement usually did not comment further on it. Those who disagreed, however, said that the school was limited by factors such as budget, facilities, and equipment. Many commented that it was incorrect for schools to think that they could ever offer a program varied enough to meet all the needs of all the students; those subjects thought that educators should not delude themselves that they are that successful.

Statement 6. Preparing students for careers receives little attention at the high school level.

The general concensus was that more than "a little" attention is paid to preparing students for careers at the high school level. However, many of the respondents felt that even more attention should be given to that task. The success of such an effort was often viewed as being directly related to the cooperation and awareness of the guidance personnel in a given school.

Statement 7. Occupational education programs provide opportunities for the disadvantaged.

The most frequently heard response was "definitely." However, this was often qualified by a statement that the disadvantaged usually do not use these opportunities as they might. Still, it was presumed that the disadvantaged stand to profit more from occupational education

programs if they would use them.

Statement 8. Local citizens are not involved in planning occupational education programs.

Responses to this statement varied considerably. In some areas it appeared that local citizens were both interested and involved. Where this was the case it seemed that the schools sought and encouraged such involvement. However, most subjects agreed that generally local citizens are not involved because, like industry, they are not allowed or invited to become involved. On the other hand, there was a strong feeling that local citizens should be involved in planning programs in occupational education.

Statement 9. Occupational education programs in the public schools, community colleges, and technical education institutes are not coordinated.

Generally people agreed with this statement, although the need for such cooperation was recognized. In each district some movement toward cooperation was cited, however. Again there seemed to be some regionally related differences, for in some instances coordination of programs appeared to be relatively successful. Most all agreed on the need for coordination, but often the status of existing programs was not known.

Statement 10. Current educational practices clearly favor those who are academically oriented.

While viewing the present state of affairs most subjects either agreed or strongly agreed with this statement. Most everyone agreed that this needs to change, that schools need to become more realistic in their programs. Although there now seems to be more opportunity and status for the academically oriented, the hope was expressed that

this is in transition. It was also recognized that a change such as the one suggested would require funds not currently available.

The second part of the personal interview was related to specific areas of occupational education. Each subject was asked to express his "image" of each of the areas. The summary of comments follows:

1. Agriculture Education

It is recognized that the sample drawn for personal interviews was a biased one since only city schools were contacted (for the sake of expediency). Thus, no school visited for interviews offered an agriculture education program. However, the comments were certainly worth reporting.

The general impression was that although county systems probably offer agriculture education programs, methods and information are often outdated and no longer useful to the students. A recurring comment was that the demand for the program is decreasing and that this program is being phased out.

2. Distributive Education

These programs appear to be strong and well established across the state. They are viewed as programs which offer very practical training, especially to many potential dropouts, thereby keeping many students interested in school. There were very few negative comments about distributive education programs, although one or two persons questioned whether or not the right skills are being taught for adequate functioning in the job market.

3. Health Occupation

Only two of the schools visited had programs in health occupations education. Generally there seemed to be a lack of awareness regarding the purpose and extent of the program.

For the most part this area was seen as a program in its developmental stage. It was also viewed as preparation for further training after high school.

4. Occupational Home Economics

This was the least known area of occupational education. Most people did not distinguish between occupational home economics and general home economics. Thus, no great need for such programs was emphasized, although comments concurred that all girls need the homemaking phase of the program.

5. Vocational Office Education

Clearly this area was viewed as the strongest, most popular, and most effective program. Everyone supported this program, and business men were more receptive to participants in it than in any other area. The reason for this appeared to be that it is one program which prepares students for immediate entry into the job market.

6. Trade and Industrial Education

While the majority of the subjects supported this area of occupational education, almost everyone cited weaknesses in current programs. The programs were viewed as not extensive enough, too general, devoid of training for specific skills, or not specialized enough.

This area appeared to be the one most in need of growth and expansion, even though the programs existed in some form in all the schools visited.

One often-voiced comment was that there needs to be a concerted effort to improve the "image" of occupational education, particularly in the eyes of parents and pre-high school students. It was held that too many people view occupational education as an area for those students

who are unable to perform academically. In many cases there seems to be something sacred about college preparatory courses, and parents push their children into these. What is being called for, it seems, is a re-education of the public--particularly parents and students--about the potential of occupational education programs. The need is to attach dignity to the program.

In many ways an extension of the above comments, a second common theme was that the present structure of occupational education programs limits their availability to only a small portion of the students. For example, those designated as "college-bound" frequently have difficulty in getting permission to take an occupational education course. This is due in part to limited resources, but in part it is a result of the practice of having an occupational education course be two or three periods in length. This eliminates the students who must take a certain number of required courses for college admittance.

A sad but strong sentiment throughout the state was one voiced primarily by administrators, teachers, and pupils. They felt that the guidance personnel in a school make little, if any, contribution to the growth and success of occupational education in schools. Several reasons were cited: (1) Counselors are over-burdened with non-guidance duties and must therefore establish priorities. In all the schools, the majority of students are college bound; consequently, these students receive more of the counselor's attention. (2) Counselors have not been educated to deal with occupational education programs; their attempts to participate rarely exceed offering job information. (3) Counselors are unaware of the business and industrial community and the opportunities there which exist for students. A frequent suggestion was that an

occupational counselor be employed who knows both the skills of the position and the resources of the community.

Factorial Analyses of Variance

Several analyses of variance were computed on the data. The first was computed using group and district and the interaction of the two. The analysis indicated that the effect of the groups (policy makers, administrators, etc.) was significant ($P < .001$) when other factors were controlled. The interaction effect of group and district together was also significant ($P < .05$) although this was probably reflective of the effect of the groups. Table 16 summarizes this analysis.

TABLE 16

Analysis of Variance of Dependent Measures by Group and District

Source	Partial ss	df	F	p
Group	6.32	6	9.33	<.0001
District	0.55	7	0.70	n.s.
Group x District	6.77	42	1.43	<.05

The data were also analyzed by race and sex and their interaction (Table 17). With all other factors controlled the only significant finding was in the interaction of race and sex ($P < .02$).

Finally, all of these factors were analyzed together (group, district, sex, and race). The data were not of full rank in all indstances, and thus this model yielded a partial sum of squares which may have been incorrect. Still, looking at the effect of group, this seemed to be the one which was most significant ($P < .001$), supporting previously stated findings.

TABLE 17

Analysis of Variance of Dependent Measures by Race and Sex

Source	Partial ss	df	F	p
Race	0.454	3	1.31	n.s.
Sex	0.001	1	0.01	n.s.
Race x Sex	1.195	3	3.44	< .02

Results of the analyses of varience were readily seen in discussion of individual questions. The reader will recall few district or race differences for the clustered statements. Repeatedly differences were found between the general public, students, policy makers, and business and industry groups. Almost all the variance in this study was accounted for by group differences.

Factors

One of the objectives of this study was to identify and rank factors inherent in the occupational education "image." The statistical test chosen to produce these factors was a factor analysis which was computed for the total sample and for each of the eight groups. Data were first factor anlayzed for the total sample and then for each group. Factor loadings were completed, producing more than ten factors for each of the analyses (10-16 factors). Factors were then rotated and names were assigned to questions with an Eigen value .30 comprising a factor. (See Appendix I for rotated factor matrix tables.)

Data from factor analyses are suspect because of the amount of statistical and research error in both the concepts measured

("image" concepts) and because of the lack of discriminatory ability of the questionnaire. Subjective, hard to define phenomena are fraught with error and extreme variability which has the corresponding effect of weakening validity and reliability of tested results. Such is definitely the case with the factor analyses.

Factor names were assigned and may be seen in the accompanying table (Table 18). Blanks in the table were factors too nebulous to suggest an in-common name. Also, the reader will note only five factors listed for the total sample and for each group. The writers chose to report only the first five factors for three reasons. First, in most every case the first five factors accounted for more than 60% of the variance in that analysis. Second, factors beyond five (6-16) became progressively ambiguous with no logical or apparent commonality. Finally, since little validity and reliability can be placed upon identified factors in the weak and confused tested "image," additional factor names would have been merely an exercise in futility.

Factor 1 in each case was the most dependable component of the tested occupational "image." Data accumulated across all groups showed that job preparation was the most valid and reliable factor followed by status of occupational education and ending in planning occupational education programs.

Factors identified in the factor analyses were global in nature and demand further study before they will be fully understood. The researchers' expectations prior to the study were that hard factors could be found for the occupational education "image." This was not the case and the reader is cautioned concerning the weak nature of the identified factors. Strong in-common factors were not found

TABLE 18

Names of Factors by Groups and by Total Sample

Group	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Policy Makers	Program Variety	Status of O.E.	_____*	Career Education	Planning O.E. Programs
Administrators	Job Preparation	Status of O.E.	_____*	Program Variety	Career Education
Teachers	Job Preparation	Planning O.E. Programs	_____*	Career Education	Status of O.E.
Parents	Job Preparation	_____*	_____*	Image of O.E.	_____*
Students	Program Variety	Status of O.E.	_____*	_____*	_____*
Business and Industry	Status of O.E.	Job Preparation	_____*	Planning O.E. Programs	_____*
General Public	Job Preparation	Status of O.E.	Career Education	_____*	_____*
All Groups	Job Preparation	Status of O.E.	Image of O.E.	Career Education	Planning O.E. Programs

* All cells which are blank represent factors which could not be identified.

because they were not present (in-common) in the minds of North Carolinians.

Model

One of the objectives for this study was to produce a research and evaluation model for the State Advisory Council on Vocational Education. The plan was to have the current researchers produce a long-term projected study for continuous or intermittent evaluation of the "image" and "image" factors utilizing the data collected during 1972 as baseline.

This part of the plan has been satisfactorily accomplished. Data revealed the basic outline of the "image" system and showed which tested factors are included in the "image." Although several factors repeatedly appeared in the results, it cannot be concluded that these factors are permanent components of a lasting "image." The reader is encouraged to think of the results of this study as one still photograph in a series of continuous photographs which when projected at the proper speed produces a moving picture of certain phenomena. Simply put, data collected during 1972 will need to be validated repeatedly before: (a) any confidence can be placed upon the results (reliability); or (b) any concrete factors can be assigned to the "image" (validity).

The model designed to accomplish the task combined general systems theory and a time-series research design. Basically, the problem was visualized on two levels. Level 1 was depicted as the total system (Total Image). Level 2 was visualized as the subsystems of Level 1 which were the vocational areas: (a) agriculture education, (b) distributive education, (c) health occupations, (d) consumer and homemaking education, (e) occupational home economics, (f) vocational office

education, and (g) trade and industrial education. If the reader will picture the two Levels as a circle, then Level I would represent the total circle (Total Image TI) while Level 2 would be subdivided slices of the circle (Vocational Areas, A_1, A_2,....A_7). Using the 1972 baseline data as input for the system then the following is proposed:

1. Basic survey = TI — Year 1 (1972)
2. TI_1 input + A_1 + A_2 = TI_2 — Year 2 (1973)
3. TI_2 input + A_3 + A_4 = TI_3 — Year 3 (1974)
4. TI_3 input + A_5 + A_6 = TI_4 — Year 4 (1975)
5. TI_4 input + A_7 = TI + Additional Output — Year 5 (1976)

The above time-series system would have several important features. First, continuous data would be collected across all groups, districts, races, and sexes for the total occupational education "image." Second, additional research data would be added each year for two occupational areas. The vocational area research would be indepth studies providing concrete information which would be added to the total "image." Third, replications of the new total "images" (TI_2, TI_3, TI_4) across years would show which factors are static and which change across time. Finally, the fifth year would produce not only the total occupational "image" but could terminate in the following additional outputs:

1. Image factors for vocational areas.
2. Image factors for groups.
3. Image factors for races.
4. Image factors for districts or counties.
5. Image factors for sex.
6. Image factors that are static.
7. Image factors that are changing.

8. Image projections for total groups and individual groups, races, districts, and sex.
9. Image goals identified
10. Image planning suggested
11. Image evaluations identified

It is the recommendation of the project staff, the project originators, and the Home Economics Center for Research that this model, or some similar model, be used to produce the desired information necessary for maximum use of Occupational Education programs. Furthermore, the potential this model has for generating the above listed outputs, in addition to serving as a vital feedback monitoring vehicle, is worthy of State Advisory Council on Vocational Education's consideration.

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APPENDIX A

Frequency Distribution of Characteristics Related to Occupational Education

Frequency Distribution of Characteristics Related to Occupational Education

Frequency	Characteristic
13	Occupational education should be an integral part of the total educational system.
8	Occupational education should be available to every person from kindergarten to retirement.
8	Occupational education should help youth develop marketable skills.
8	Occupational education programs must join forces with all educational, industrial, agricultural, business, labor and professional groups to make the programs more acceptable, realistic and attractive.
7	Occupational education should prepare youth for continuous employability.
7	Occupational education should introduce students to the world of work (career orientation programs).
6	Occupational education should provide opportunities for disadvantaged students.
6	Some social ills--underemployment, illiteracy, rising crime rate amoung youth and dropouts--may reflect a lack of occupational education programs for those who need it most.
6	Occupational education should help students plan for careers.
6	Occupational education programs should be flexible in order to adapt to changing needs of society.
6	Occupational education should make students aware of the variety of occupations in the world of work.
6	Occupational education should prepare individuals to engage successfully in socially useful occupations.

(Table continued on next page)

Frequency	Characteristic
6	Occupational education should attempt to develop not only skills but attitudes and work habits which lead to successful employment and personal fulfillment.
6	Occupational education programs should prepare students for job entry or continuation of occupational programs at the post-secondary level.
5	Occupational education should be sensitive to human needs.
5	Occupational education should be concerned about the needs of all people.
5	Occupational education can alleviate some unemployment and poverty.
5	Occupational education needs increased public attention.
5	Occupational education has been neglected.
5	Occupational education programs should be concerned with meeting the manpower needs of society.
5	Occupational education is held in poor esteem by students, parents and educators.
5	Occupational education programs should take into account future occupational needs.
4	Occupational education should provide for individual differences.
4	Occupational education programs should be increased in scope as the population increases.
4	Occupational education needs the support of all segments of society in order to play a prominent role in the total educational system.
3	Occupational education should not be terminal.

(Table continued on next page)

Frequency	Characteristic
3	Occupational education should be concerned with developing the employment potential of girls as well as boys.
3	Occupational education programs are useful primarily to students of lesser intellectual competence.
3	Many persons share the attitude that says occupational education is designed for somebody else's children.
3	The rather poor image of occupational education is due to a lack of understanding of the objectives and purposes of occupational education and of the opportunities available.
3	Job placement should be the responsibility of the occupational education programs.
3	Occupational education programs should include counseling for all age groups.
3	Occupational education should avaoid emphasis on building a specific set of skills.
3	Occupational education programs can be effective only when there is cooperation at all levels--local public schools, community colleges and technical institutes.
3	Educators have been neglecting the job-oriented youngster.
3	Federal, state and local systems should provide for occupational education.
3	Occupational education should be integrated into the general education program.
2	Occupational education should be included as a primary goal of education.
2	Occupational education should be product-oriented.
2	Occupational education should move toward the concept of career education.

(Table continued on next page)

Frequency	Characteristic
2	Occupational education should emphasize training a student to become skilled in one specific area.
2	Occupational education should give students an awareness of their own potential and a sense of dignity and pride in their jobs.
2	Basic courses should be included in occupational programs at all levels.
2	Greater career consciousness is needed throughout the educational system.
2	Students are being trained for irrelevant, unimportant or outdated occupations.
2	The separate but equal approach to occupational education is bad theory and bad practice.
2	Occupational education programs at the post-secondary level attract new industry.
2	Occupational education programs are needed in rural areas.
2	Occupational education needs to carry prestige in the minds of the public, administrators and students.
2	Opportunities for the technically trained are increasing far more rapidly than are opportunities for graduates of liberal arts colleges.
2	To become successful in an affluent society one needs to obtain a college degree.
2	Occupational education programs are affected by the values and attitudes of all segments of society.
2	Occupational education programs need the support of policy makers.
2	Occupational education should develop in the student a respect for all work.

(Table continued on next page)

Frequency	Characteristic
2	Occupational education should include information about how to obtain jobs, the requirements for specific jobs and what the worker does.
1	Occupational education should have a philosophy harmonious with the total educational system.
1	Occupational education should be a process of learning by doing.
1	Occupational education programs enroll less than 20% of high school students.
1	Occupational education graduates are better satisfied with their jobs than comparable graduates of other high school programs.
1	Occupational education graduates keep jobs longer than comparable graduates of other high school programs.
1	Occupational educators have an inferiority complex.
1	Occupational education programs should include follow-up of graduates as a primary goal.
1	Occupational education personnel (management) should be specially trained and skilled individuals.
1	Occupational education programs fail to include some significant areas of employment.
1	There are an insufficient number of occupational programs because of a lack of qualified personnel.
1	In order to attract qualified persons from business and industry, occupational education teachers should be paid a higher salary than regular teachers.
1	In planning occupational education programs we should be as concerned about the needs of the individual as we are about the needs of his employer.

(Table continued on next page)

Frequency	Characteristic
1	There are an insufficient number of occupational education programs due to a lack of money.
1	Occupational education should provide opportunities for students to talk to and observe individuals on the job.
1	Occupational education should stem from and complement the subjects being studied.
1	Occupational education should provide an examination of how man uses work for self-support.
1	Occupational education should give the student an understanding of the function of work in our economy.

APPENDIX B

Occupational Education

Questionnaire

Circle the response which most nearly indicates your true feeling about occupational education at the present time. Please answer every item.

Example: Occupational education has been neglected. SA (A) U D SD NR

Key: SA = Strongly Agree
A = Agree
U = Uncertain
D = Disagree
SD = Strongly Disagree
NR = No Response (or unknown)

All occupational education programs refer to those in the public high schools except where otherwise designated.

1. Occupational education in high school prepares students for entry-level positions. SA A U D SD NR

2. Occupational education programs in schools do not attract new industries to an area. SA A U D SD NR

3. Occupational education programs adapt to the changing needs of the local manpower market. SA A U D SD NR

4. Occupational education teachers do not help students find jobs. SA A U D SD NR

5. Occupational education programs do not provide job opportunities for handicapped individuals. SA A U D SD NR

6. Occupation awareness activities are provided for students in the elementary grades. SA A U D SD NR

7. Occupational education programs prepare students to enter college. SA A U D SD NR

8. Occupational education teachers require less education than do teachers of academic courses. SA A U D SD NR

9. Scholastically able students are discouraged from entering occupational education programs. SA A U D SD NR

10. Occupational education training develops within students a sense of dignity and pride in their jobs. SA A U D SD NR

11. Industry cooperates in the planning of occupational education programs. SA A U D SD NR

(CONTINUE--GO TO NEXT PAGE)

12.	Occupational education programs are too costly in terms of money, time and effort.	SA A U D SD NR
13.	Junior high school programs focus on occupational orientation.	SA A U D SD NR
14.	Occupational education programs do not emphasize attitudes and work habits which are necessary for successful employment.	SA A U D SD NR
15.	Occupational education programs are primarily for students from low income families.	SA A U D SD NR
16.	The occupational education programs in my county are varied enough to serve the needs of all students.	SA A U D SD NR
17.	Occupational education at the high school level provides training in a broad cluster (wide variety) of occupational areas.	SA A U D SD NR
18.	School administrators do not support occupational education programs.	SA A U D SD NR
19.	Most high school students are being trained for irrelevant occupations.	SA A U D SD NR
20.	Career exploration activities are provided for students in grades 7-9.	SA A U D SD NR
21.	Some social ills--underemployment and rising crime rate among youth--indicate a lack of occupational education programs for those who need them most.	SA A U D SD NR
22.	Occupational education fails to make students aware of their own potential.	SA A U D SD NR
23.	At the high school level, occupational education provides training for specific skills.	SA A U D SD NR
24.	Occupational education programs in high school prepare students for a wide range of job opportunities.	SA A U D SD NR
25.	Occupational education programs take into account future needs of society.	SA A U D SD NR

(CONTINUE--GO TO NEXT PAGE)

26.	Preparing students for careers receives little attention at the high school level.	SA A U D SD NR
27.	Occupational education programs provide opportunities for the disadvantaged.	SA A U D SD NR
28.	Not enough information is available to the public about occupational education programs.	SA A U D SD NR
29.	Occupational education is designed for somebody else's children, not mine.	SA A U D SD NR
30.	At the community college level, students are prepared to enter specific occupations.	SA A U D SD NR
31.	Local citizens are not involved in planning occupational education programs.	SA A U D SD NR
32.	Occupational education programs develop attitudes and work habits which lead to personal fulfillment.	SA A U D SD NR
33.	Occupational education programs prepare students for entry into technical institutes.	SA A U D SD NR
34.	Occupational education programs reduce the dropout rate in the public schools.	SA A U D SD NR
35.	Occupational education programs are supported by the general public.	SA A U D SD NR
36.	Occupational education programs in the public schools, community colleges, and technical institutes are not coordinated.	SA A U D SD NR
37.	In high schools there is too much emphasis on preparing students for college.	SA A U D SD NR
38.	High school students planning to go to college do not take occupational education courses.	SA A U D SD NR
39.	Occupational education programs are concerned about the needs of individual students.	SA A U D SD NR
40.	Occupational education programs are meeting the manpower needs of society.	SA A U D SD NR

(CONTINUE--GO TO NEXT PAGE)

41.	A college degree guarantees success in our society.	SA A U D SD NR
42.	Occupational education programs are useful primarily to students of low intelligence.	SA A U D SD NR
43.	Occupational education is not held in high esteem by many students and educators.	SA A U D SD NR
44.	Current educational practices clearly favor those who are academically oriented.	SA A U D SD NR
45.	Occupational education programs are concerned primarily with the needs of the employer.	SA A U D SD NR
46.	Guidance services are inadequate for students in the public schools.	SA A U D SD NR

(CONTINUE--GO TO NEXT PAGE)

1. A. Indicate what your image is of each of the specific areas of occupational education listed below. Check the response which corresponds most closely with your feelings.

	Very Good	Good	No Opinion	Poor	Very Poor
Agriculture Education	___	___	_____	___	___
Distributive Education	___	___	_____	___	___
Health Occupations	___	___	_____	___	___
Consumer and Homemaking Education	___	___	_____	___	___
Occupational Home Economics	___	___	_____	___	___
Vocational Office Education	___	___	_____	___	___
Trade and Industrial Education	___	___	_____	___	___

B. Please explain why you feel as you do about any or all of the areas listed above._____

_____

_____

2. Do you know the kinds of occupations for which students can be trained in each of the specific areas of occupational education at the high school level?
Indicate your choice by checking the appropriate response.

	Yes	No
Agriculture Education	_____	_____
Distributive Education	_____	_____
Health Occupations	_____	_____
Occupational Home Economics	_____	_____
Vocational Office Education	_____	_____
Trade and Industrial Education	_____	_____

APPENDIX C

Personal Data Sheets

(Policy Makers)

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ____Male ____Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age: ____24 or younger ____45-54
____25-34 ____55 or older
____35-44

5. Highest academic level attained:
___Grade school
___Not a high school graduate
___High school
___Certificate beyond high school
___Associate degree
___Bachelor's degree
___Master's degree
___Other(specify)_____

6. Position as a policy maker:
___School board member
___Board of trustees member
___County commissioner
___State staff personnel
___Other(specify)
_____

7. Experience with occupational education:
___As a student in occupational education courses
___As a teacher of an occupational education subject
___As a parent whose child(ren) has(have) taken occupational education courses
___No experience with occupational education
___Other(specify)_____

8. How should occupational education programs be financed?
___State provide facility--county provide operation cost
___County provide facility--state provide operation cost
___State provide for both the facility and the cost of operation
___Other(specify)_____

Administrative Personnel

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ____Male ____Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age: ____24 or younger ____45-54
   ____25-34 ____55 or older
   ____35-44

5. Highest academic level attained:
   ___Associate degree
   ___Bachelor's degree
   ___Master's degree
   ___Doctor's degree
   ____Other(specify)_____

6. Position as a professional administrator:
   ___Superintendent
   ____Assistant superintendent
   ____Principal (secondary)
   ____Assistant principal
   ___Local occupational education director
   ___Supervisor
   ___Other(specify)_____
   ___(Principal-elementary)

7. Experience with occupational education:
   ___As a student in occupational education courses
   ___As a teacher of an occupational education subject
   ___As a parent whose child(ren) has(have) taken occupational education courses
   ___As a high school principal who is responsible for the administration of occupational education programs
   ___As a county superintendent whi is responsible for the administration of occupational education programs
   ___No experience with occupational education
   ___Other(specify)_____

8. How should occupational education programs be financed?
   ___State provide facility--county provide operation cost
   ___County provide facility--state provide operation cost
   ___State provide for both the facility and cost of operation
   ___Other(specify)_____

Teachers

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ____Male ____Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age: ____24 or younger ____45-54
____25-34 ____55 or older
____35-44

5. Highest academic level attained:
___Grade school
___Not a high school graduate
___High school
___Certificate beyond high school
___Associate degree
___Bachelor's degree
___Master's degree
___Doctor's degree
___Other(specify)_____

6. Position as a professional operator:
___Science teacher
___English teacher
___Mathematics teacher
___Art teacher
___Social studies teacher
___P. E. teacher
___Counselor
___Agriculture teacher
___Home economics teacher
___Business education teacher
___T & I teacher
___Distributive education teacher
___Other(specify)_____
___(Elementary teacher)

7. Experience with occupational education:
___As a student in occupational education courses
___As a teacher of an occupational education subject
___As a parent whose child(ren) has(have) taken occupational education courses
___No experience with occupational education
___Other(specify)_____

8. How should occupational education programs be financed?
___State provide facility--county provide operation cost
___County provide facility--state provide operation cost
___State provide for both the facility and cost of operation
___Other(specify)_____

Parents

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ___Male ___Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age: ___24 or younger ___45-54
___25-34 ___55 or older
___35-44

5. Present occupation:
Wife's_____
Husband's_____

6. Highest academic level attained:
___Grade school
___Not a high school graduate
___High school
___Certificate beyond high school
___Associate degree
___Bachelor's degree
___Master's degree
___Doctor's degree
___Other(specify)_____

7. Experience with occupational education:
___As a student in occupational education courses
___As a teacher of an occupational education subject
___As a parent whose child(ren) has(have) taken occupational education courses
___No experience with occupational education
___Other(specify)_____

8. How should occupational education programs be financed?
___State provide facility--county provide operation cost
___County provide facility--state provide operation cost
___State provide for both facility and cost of operation
___Other(specify)_____

Students

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ___Male ___Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. What grade are you in now?
   ___8th grade
   ___9th grade
   ___10th grade
   ___11th grade
   ___12th grade

5. Have you taken or do you plan to take occupational education courses?

   ___Yes ___No

   If yes, which areas?
   ___Agriculture education
   ___Vocational office education
   ___T & I education
   ___Occupational home economics
   ___Distributive education
   ___Health occupations
   ___Consumer and homemaking education

6. What are your plans upon completion of high school?
   ___Marriage
   ___Work
   ___Work and marriage
   ___Community college
   ___Four-year college
   ___Technical training
   ___Other(specify)_____

(Business and Industry Employers)

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ___Male ___Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age:
___24 or younger
___25-34
___35-44
___45-54
___55 or older

5. Present occupation:
___Sales, retail
___Sales, wholesale
___Service
___Manufacturing
___Other(specify)_____

6. Highest academic level attained:
___Grade school
___Not a high school graduate
___High school
___Certificate beyond high school
___Associate degree
___Bachelor's degree
___Master's degree
___Doctor's degree
___Other(specify)_____

7. In what way have you had experience with occupational education programs?
___As a student in occupational education courses
___As a parent whose child(ren) has(have) taken occupational education courses
___As an employer of an occupational education graduate
___Other(specify)_____
___(No experience with occupational education programs)

8. Approximately what percentage of your employees have had occupational training as part of their high school program?
___0-9%
___10-19%
___20-29%
___30-39%
___40% or more
___Don't know

9. How well satisfied are you with these person's work?
___Well satisfied
___Moderately satisfied
___Dissatisfied
___Undecided
___I have no employees who have had occupational training as part of their high school program

10. Do you provide training programs for your employees?
___Yes ___No ___Don't know

11. Generally speaking, would you as an employer prefer to hire persons who have had occupational training?
___Yes ___No ___Don't know

(General Public)

Please check the appropriate response and write in additional comments as needed.

1. County:_____

2. Sex: ___Male ___Female

3. Race: __White __Black __American Indian __Other(specify)_____

4. Age:
   ___24 or younger
   ___25-34
   ___35-44
   ___45-54
   ___55 or older

5. Highest academic level attained:
   ___Grade school
   ___Not a high school graduate
   ___High school
   ___Certificate beyond high school
   ___Associate degree
   ___Bachelor's degree
   ___Master's degree
   ___Doctor's degree
   ___Other(specify)_____

6. Present occupation:
   Husband's_____
   Wife's_____

7. Do you presently have children enrolled in public schools?
   ___Yes ___No

8. Have you had children enrolled in public schools?
   ___Yes ___No

9. Experience with occupational education:
   ___As a student in occupational courses
   ___As a teacher of an occupational education subject
   ___As a parent whose child(ren) has(have) taken occupational education courses
   ___No experience with occupational education
   ___Other(specify)_____

10. How should occupational education programs be financed?
    ___State provide facility--county provide operation cost
    ___County provide facility--state provide operation cost
    ___State provide for both the facility and cost of operation
    ___Other(specify)_____

APPENDIX D

Cover Letters

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

School of Home Economics

The Home Economics Center for Research, in cooperation with the North Carolina State Advisory Council on Vocational Education, is conducting a study to determine the "Image of Occupational Education in North Carolina." It is desirable to obtain the image of occupational education as held by various segments of the population throughout the state.

You have been selected to participate in this study. The kinds of information being sought will be of significant value to the North Carolina State Advisory Council on Vocational Education, the State Department of Public Instruction, and teacher educators as they develop and implement programs within this state.

Please assist us by completing each item on the enclosed questionnaire and return in the self-addressed stamped envelope by April 5. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

You can provide us with vital information. Therefore, your cooperation and promptness in responding to the questionnaire will be greatly appreciated. Thank you for the consideration given this request.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B. Johnson

Mildred B. Johnson, Chairman
Home Economics Education

Ann A. Harrison

Ann A. Harrison
Project Director

GREENSBORO, NORTH CAROLINA / 27412

THE UNIVERSITY OF NORTH CAROLINA comprises: *The University of North Carolina at Greensboro; The University of North Carolina at Asheville; The University of North Carolina at Chapel Hill; The University of North Carolina at Charlotte; The University of North Carolina at Wilmington; North Carolina State University at Raleigh*

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AT GREENSBORO

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You have been selected to represent the elementary teachers in your county. Please assist us by completing each item on the teacher questionnaire. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

Your cooperation and promptness in responding to the questionnaire will be greatly appreciated. Please return the completed questionnaire to your principal immediately as he has been asked to return the questionnaires by April 5. Thank you for the consideration given this request.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B. Johnson

Mildred B. Johnson, Chairman
Home Economics Education

Ann A. Harrison

Ann A. Harrison
Project Director

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You have been selected to represent the secondary school principals in your county. Please complete each item on the enclosed administrative personnel questionnaire. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

In order to obtain responses from teachers, students, and parents, we are soliciting your help. Would you please select two teachers at random to complete the teacher questionnaire and have each teacher select two students at random to complete the student questionnaire. The students will be instructed to take a questionnaire home to their parents to complete and return to the teacher.

Please return the teacher, student, and parent questionnaires with your own in the self-addressed stamped envelope by April 5. Your willingness to take time from a busy schedule to provide us with this vital information will be greatly appreciated.

Your cooperation and promptness in responding to the questionnaire is of utmost importance. Thank you for the consideration given this request.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B. Johnson

Mildred B. Johnson, Chairman
Home Economics Education

Ann A. Harrison

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Project Director

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You have been selected to represent the secondary school teachers in your county. Please assist us by completing each item on the teacher questionnaire. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

In order to obtain responses from students and parents, we are soliciting your help. Would you please select two students at random to complete the student questionnaire and have each student take a questionnaire home to his or her parents to complete and return to you immediately. Please return the completed student, parent, and teacher questionnaires to your principal immediately, as he has been asked to return all questionnaires by April 5.

Your cooperation and promptness will be greatly appreciated. Thank you for the consideration given this.

Joe Clary

Joe Clary, Executive Director
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You have been selected to represent the elementary school principals in your county. Please complete each item of the enclosed administrative personnel questionnaire and select two teachers at random to complete the teacher questionnaire. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

Your cooperation and promptness in responding to the questionnaire will be greatly appreciated. Please return the three questionnaires in the enclosed self-addressed stamped envelope by April 5. Thank you for the consideration given this request.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

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You have been selected to represent the students and parents in your county. Please assist us by completing each item on the student or parent questionnaire. Be sure that your answers express what you think occupational education really is today. All responses to the questionnaire will be treated with confidence.

When the questionnaires have been completed, return immediately to the teacher. The principal of your school has been asked to return all questionnaires by April 5. Therefore your cooperation and promptness will be greatly appreciated. Thank you for the consideration given this request.

Joe Clary

Joe Clary, Executive Director
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Project Director

GREENSBORO, NORTH CAROLINA / 27412

THE UNIVERSITY OF NORTH CAROLINA comprises: *The University of North Carolina at Greensboro; The University of North Carolina at Asheville; The University of North Carolina at Chapel Hill; The University of North Carolina at Charlotte; The University of North Carolina at Wilmington; North Carolina State University at Raleigh*

APPENDIX E

Follow-up Letters

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

School of Home Economics

About three weeks ago a questionnaire concerning the "Image of Occupational Education in North Carolina" was mailed to you. We realize that you are busy and perhaps this is the reason that your questionnaire has not been returned.

Since you were selected to represent a particular segment of the population in the State of North Carolina, the information that you can provide is essential to this study. We would appreciate it if you would complete the enclosed questionnaire and return it to us immediately. If your questionnaire has already been returned, please disregard this letter.

Your cooperation and promptness in this matter will be greatly appreciated.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B. Johnson

Mildred B. Johnson, Chairman
Home Economics Education

Ann A. Harrison

Ann A. Harrison
Project Director

GREENSBORO, NORTH CAROLINA / 27412

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THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

School of Home Economics

About three weeks ago questionnaires concerning the "Image of Occupational Education in North Carolina" were mailed to you. We realize that you are busy and perhaps this is the reason that your questionnaires have not been returned.

Since you were selected to represent a particular segment of the population in the State of North Carolina, the information that you can provide is essential to this study. Would you select two teachers at random to complete the teacher questionnaires and have each teacher select two students at random to complete the student questionnaires. The students should be instructed by their teacher to take a questionnaire home to their parents to complete and return to the teacher.

We would appreciate it if you would return the teacher, student and parent questionnaires with your own in the self-addressed stamped envelope as soon as possible. If your questionnaires have already been returned, please disregard this letter.

Your cooperation and promptness in this matter will be greatly appreciated.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B. Johnson

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Home Economics Education

Ann A. Harrison

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THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

School of Home Economics

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Since you were selected to represent a particular segment of the population in the State of North Carolina, the information that you can provide is essential to this study. We would appreciate it if you would complete the enclosed administrative personnel questionnaire and select two teachers at random to complete the teacher questionnaires. Please return the completed questionnaires to us immediately in the self-addressed stamped envelope. If your questionnaires have already been returned, please disregard this letter.

Your cooperation and promptness in this matter will be greatly appreciated.

Joe Clary

Joe Clary, Executive Director
North Carolina State Advisory Council

Mildred B Johnson

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Home Economics Education

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APPENDIX F

Questions for Personal Interviews

1. Occupational education in high school prepares students for entry-level positions. SA A U D SD NR

2. Occupational education programs adapt to the changing needs of the local manpower market. SA A U D SD NR

3. Industry cooperates in the planning of occupational education programs. SA A U D SD NR

4. Occupation awareness activities are provided for students in the elementary grades. SA A U D SD NR

5. The occupational education programs in my county are varied enough to serve the needs of all students. SA A U D SD NR

6. Preparing students for careers receives little attention at the high school level. SA A U D SD NR

7. Occupational education programs provide opportunities for the disadvantaged. SA A U D SD NR

8. Local citizens are not involved in planning occupational education programs. SA A U D SD NR

9. Occupational education programs in the public schools, community colleges, and technical institutes are not coordinated. SA A U D SD NR

10. Current educational practices clearly favor those who are academically oriented. SA A U D SD NR

What is your image of each of the specific areas of occupational education?

Agriculture Education

Distributive Education

Health Occupations

Occupational Home Economics

Vocational Office Education

Trade & Industrial Education

APPENDIX G

Respondents' Comments on Their Ratings of Occupational Education areas (Addendum to Questionnaire)

These comments are in response to the question, "Please explain why you feel as you do about any or all of the areas (of occupational education)listed above." The comments were taken verbatim from the questionnaires.

Policy Makers

Vocational office education, agriculture and home economics as vocational subjects have been a part of educational opportunities for so long that they are taken for granted. The newer ones need time for public acclimation and wide acceptance, especially at levels lower than college.

High placement rate in vocational office education, good placement in distributive education plus highly visible nature of the program plus teachers who project a good image.

I don't know what "occupational home economics" is. In health occupations the students at least need exposure to what careers are available. Students are trained as fairly good auto mechanic helpers. Office students have good basic fundamentals.

Agriculture education--only in county schools and I am not familiar with it. Others marked with "no opinion" are relatively new or basically sparse.

Agriculture is not very well understood. I feel trade and industrial education is what is most needed to help drop-outs and others to obtain good jobs in trades and thusly keeping them employed and off relief rolls.

Agriculture is not very well understood and few people realize the great variety of careers that are closely related to agricultural education.

I do not have the answers to the above questions--some day maybe I hope to with your help.

I feel that the areas marked less than good are victims of instructors--they (instructors) are not prepared--or don't care.

Need trade and industrial education in all senior high schools in North Carolina.

Lack of facilities is severely hampering progress in agricultural and trade and industrial education.

All categories are needed in order to provide equal opportunities for each student as talents vary for all.

To create interest in pupils to remain in school.

Too long occupational education has been for the least, the lowest and the lost student. A wide, revelant variety of career studies in occupational education should equate the emphasis on undergraduate studies, in both secondary and elementary grades.

Home economics and related subjects better organized and administrations, teachers and training backgrounds long established. Agriculture too varied--and low participation level has fallen due to lack of interest by students, who prefer to go into industry, therefore, quantity of students and quality of instructers has suffered. Others are too new to have been effective as yet, however programs improving (distributive education, trade, office and industrial).

My answers based on our county's program. We will complete a comprehensive building and staffing program during summer of 1972 at which time all areas except agriculture will hopefully rate "very good".

I live in a rural area, good vocational agriculture department, poor facilities and faculty for most of the other areas. Our small schools are unable to offer as much as we would like.

Cost of college degrees are too expensive especially for values received on college campuses today. Too much rebellion--not enough study. Professors have lost control of classrooms.

Based on my own children.

We need more vocational training in all fields.

I am not familiar with the programs in agriculture education and occupational home economics as we do not have them in our local schools.

Personal knowledge of those teaching the courses.

These answers were based on our situation, not particularily on the state as a whole.

We in Moore have had a wide field relative to each one of the subjects with good success.

The shops, etc., part of agriculture is most important part here. Agriculture is no longer taught mainly in schools. Health occupations are--well underway here.

Too much emphasis on agriculture education and home economics and too little on everything else.

Our county system at this time offers only home economics and agriculture in the vocational field.

The programs are not extensive enough--this is probably due to lack of funds and not lack of care or concern.

Too much effort, time, and money is alloted to the academically talented students in proportion to that expended on those students (the majority) whose aptitudes lie in vocational areas.

Vocational education classes are used as a means of graduation instead of a means of learning a trade.

Agriculture education is very costly and does not meet the needs of enough pupils that could be spent on occupational educations.

Have had close working relationship with schools as an employer and have found very good effort on the part of the schools and school officials. They are up against some pretty heavy odds, however, with today's students and parents.

I feel that the programs are very good but that there is not enough publicity about them and the number of students in them is too small.

We are big believers in Stanly county in the above areas and believe our record and programs indicate this.

The general public is not properly informed about occupational education and they will not accept its needs until they are instructed (properly).

Too much emphasis has been given to myth that a liberal arts degree is prerequisite for a happy successful life, and that manual work is demeaning.

The ones checked in our area are good and are also getting better.

There seems to be very little interest in agriculture.

There isn't any occupational education available at the high school level in this county except in the clerical field.

I feel that guidance in these areas ought to begin in high school. Right now I am unfamiliar with what is being accomplished in the local high schools. I believe the local technical institutes are doing a good job in training individuals and in allowing industries a place to train prospective employees. I also feel that balanced liberal arts instructors should accompany vocational training.

Observation over a number of years indicate that distributive education coordinators are doing a very good job. Although health occupation programs are limited; they, too, seem to be of good quality.

I have no knowledge of any occupational home economics being taught in any of our local schools or technical institutes. All the other programs are strong and doing an excellent job for our students.

I do not feel we stress occupational education as much as we should. We seem to have made many students feel college is the only good path to take. I am probably prejudiced about the distributive education program because we have a strong one here. Trade and industry seems especially weak, as does health.

Health education, along with other service related professions (occupations) and subprofessional positions have not received adequate emphasis.

I think the average students from our county schools are fairly well trained although there is always room for improvements.

See less and less interest in home economics and homemaking education but may vary between school districts.

These opinions are based on high school level education as provided at present. All these, especially the more technical areas, need training above the high school level.

Although there is a long way to go and much work to be done, I think occupational education teachers are doing a good job.

Agriculture: We have too many farmers now!
Trade and Industry: High school instructors I have known weren't qualified.

Teaching is of poor quality because it appears that most, not all, vocational teachers are not educated in fields other than their speciality.

This state has long been oriented toward agriculture, thus it has promoted and supported agricultural education programs in the public schools. Other areas of vocational education, I believe, have lagged far behind.

The needs are not geared to the program.

The demand on the part of students is limited. The services of instructors are in over supply in quite a few areas and are unavailable in others. Too many agriculture instructors are "marking time until retirement." This situation may not exist now but did years ago when I was a county school board member.

Consumer education is vital--everyone needs it.

The time will soon be here, when nobody will be taught to raise food, repair men for painting, fixing roofs, plumbing, farm, repair TV, boiler plants--the day will soon be here when American people will have to go short of a lot of this service--if we don't soon train these people or make plans for them.

Students should be better prepared for the trade and industrial field.

Need more coordination with technical institutes and more tailoring of skills taught to present and future needs of area. Somehow, young people must form belief that it is not a "disgrace" to go into vocational programs and these programs must do more than make a start at training in a particular skill.

Occupational education should be encouraged in our public school system.

I feel that occupational education courses have done more to strengthen our schools in the past 10 years and to redeem our percentage of drop-outs than any other one thing.

All programs need improvements. Programs are very inadequate in high school.

I do not believe that there is much actual occupational home economics at high school level. Trade and industry and office education do a good job with inadequate staffing and really poor equipment.

We need more agri-business training in agriculture. We need more courses for women in trades and industry.

Most of these areas are not specific enough. I do not feel they give a student a realistic view of any of the areas.

The image of any occupation, if honest and conscientiously applied, is very good.

They are all good.

Administrative Personnel

My decision is based on my years of experience as a director of occupational education and the current knowledge which I have in this field.

In too many cases it has been a state program of self-serving and self-preserving individuals failing to understand and support total school programs.

Primarily based upon the attitude and competency of the teacher. Quite often teachers certified on the basis of their skill do a much better job than college trained teachers.

Agriculture education is too general: vocational office education seems to attract students who are not likely to function well within an office. These students should be more adept at use of language, spelling, etc. Trade and industry courses seem to be the most relevant to needs of students and industry.

The image of occupational education in all areas has changed a great deal in the last 2 years. We have worked closely with business and industry to develop this new image.

Too many of the occupational programs, i.e., vocational agriculture and home economics, for example, are still operated as they were 15 to 20 year ago--they have not changed as they should.

The program is no longer relevant to the student's needs. The whole program needs to be modernized, and most of the teachers retrained.

Six year observation and participation--effectiveness of programs is almost 90% in consonance with teacher dedication and capabilities.

Individual needs of students are lost in the shuffle of the meeting and criteria of establishing these areas.

The teacher determines the quality--many trade and industry teachers lack training. Many good agriculture teachers have left the field.

Meet more of the needs of society from the last two areas. Broader curriculum.

Eighty-one percent of high school (10-12) students are enrolled in a vocational program.

In working with all areas, I see direct results of these programs in terms of what is happening to students.

In my opinion, these programs can meet very real needs. My experience is that the key is the teacher more than the program's strengths or weaknesses.

There is a definite need for expansion of occupational education. We have good programs, but not enough to meet either needs or student requests to enroll. It is impossible to finance every occupational program but we should be able to offer more. I had to make students drop some occupational programs because of lack of space and staff. Many more students would take occupational courses if we had space, staff, and sufficient funds to operate an expanded program.

All areas of occupational education are effective; however, I feel that those areas checked "good" need to be looked at from a direction standpoint.

Much of agriculture education has been unresponsive to needed changes. Good image where it has changed with the times. Vocational office education, in my experience, has done outstanding work.

Teachers make the program in most cases.

Education--sum total of man's learning.

The world of work is becoming more technical.

The areas referred to here are mostly rural. Thusly, for the most part, the students seldom see the occupational side of things first hand. Therefore, I feel occupational education is a must.

As a student, occupational teacher, and principal, I realize the need and value of occupational education.

There is in our system a strong effort being made to improve the program. I do not work near or close to it.

I feel like health occupations and trade and industrial education will serve the students better as they seem to be related to the world of work.

Trade and industry is the only area we have. Drafting and carpentry. We also do a good job in the commercial areas.

Not nearly enough is done in health occupations! Agriculture and home economics education have been in existence for years and have continually improved but aren't yet as excellent as they could be.

I am deeply interested and concerned about all areas of occupational education, and feel like we are doing a pretty good job with it.

Experience has taught the value of these programs to children.

The programs checked very good and good are the ones I am familiar with. I have had no experience with the others.

Programs have been in effect for some time.

Agriculture education is handicapped by serving many students who are enrolled simply because the program they desire is not available. All responses are qualified by variation in quality of any program.

Health occupations are increasing in importance, but student interest lags.

Agriculture needs to be restructured.

The reason that I have checked several responses is because we have several programs in each area. Some programs are better than others.

For some years I have felt that many of the youth in agriculture education were really not interested in it and had no intention of following it. Some of our instructors were not youth oriented and some did not even work too well with adult groups.

All programs have a good image in this area.

In my opinion, the image concerning occupational education is good to very good at most schools. The job being done by the individual teachers has much to do with the image people have pertaining to an occupational education program.

Home economics (consumer and homemaking education) to many people is not a part of occupational education.

Leadership generally determines the type of program we have. Personnel is a major key in how good or poor a program is and the image is really based on the quality of the program.

Agriculture and home economics do not train students for specific occupations to the degree that is desired.

Those rated poor are so rated because of the poor quality instruction generally prevailing, lack of creative approaches to problem solving, lack of relevant skills development. Programs are not competency based, more time based.

Our county has one of the most successful occupational programs in the area, and all the specific areas checked very good are part of our program. Many honors have come to our program because of the training given in these programs.

Children should be taught dignity and respect for skilled work.

All of the above are offered in this county and seem to be filling a need.

Agriculture is considered a crip course, not many students have an idea of going back to farm. Other areas have been received well by students and parents. Improvement is still needed.

Because of student and community response to the programs.

Most students are enrolling in distributive education to earn money rather than for specific educational purposes.

Each area serves a segment of the student population and the world of work. Each must be maintained at its highest potential. We need more emphasis on health occupation in my area.

I'm for them all!

Too much group instruction and not enough individual in some agriculture programs. Many programs are excellent.

Employment needs.

I feel most of our occupational programs are good. Most could be improved with help from principals and guidance personnel who really understand what the programs are trying to do.

I am not familiar enough with some of the programs to voice an opinion.

I had some contact with the four in which I had an opinion when working in a union school 1-12.

In my county, state funds have been provided only for agriculture and home economics. Our program is expanding to other areas this year.

Image that has been established in the past 20 year in agriculture education.

In our section which is predominately rural--a large percentage of our families are educationally deprived--a trade or home economics is a reasonable solution for many of our students.

From what I have seen done with these areas in other schools.

Inadequate resources.

I feel that too few boys are engaged in agriculture as a livelihood to merit its major position in some schools. Marketing is big business and many people are needed to fill the selling jobs. I think distributive education is training these people.

In my 41 years in public schools it seems to me vocational education is being sorely neglected.

Some are doing the job and some are not. Agriculture and home economics are <u>out of date</u>. Teacher training is <u>not</u> relevant.

Distributive education does a lot for a student in knowing how to seek employment. Office education would be valuable to the noncollege student than any of the others.

I feel that occupational education is meeting the needs of many students and reduces the number of dropouts.

Vocational office education, health occupation, and agriculture education are not meeting the needs of our students--the other occupational programs listed are doing a good job but meet the needs for just a few students.

1. We have a good program and an excellent teacher. (consumer and homemaking)
2. I have seen these four areas more in operation. (distributive education)
3. No experience in these two areas. (agriculture)

We do not have occupational home economics classes at the present in Gaston county.

Personal observation.

Response indicates value of areas. The number of students continuing in an area for occupational purposes. I do not regard consumer and homemaking as occupational. This course should be required of all students.

Those checked good and very good are relevant, popular, current, and produce good results--others are too broad and general, and too tradition bound--(comments based on limited experience in one school system).

Vocational office education--no coordinator because of few office jobs available. Agriculture education--few direct courses in area. Reason: few students returning to farm.

We in Ashe County do not have many of those programs in operation. We are slow in getting away from agriculture.

Agricultural education has been very strong in the East for years. The other programs are beginners and have not proven themselves.

All areas except vocational office education are offered in the school where I am employed. I have taught vocational agriculture and some areas of mechanics in a limited way and am trained in guidance and counseling at community college level with emphasis on vocational technical education.

I strongly favor occupational education because of personal experience. My major field is math and science, but I also took trade courses that have helped me in many ways.

Possibly we judge occupational education by the cooperative programs--such as distributive education, office education, etc.

My image of each area is good but I feel the quality of instruction needs to improve in all areas. Much of the time I see very little individualization in the classroom.

Distributive, vocational office education, and trade and industrial education are doing more for job placement.

Agriculture education needs to stay abreast of times--rather traditional.

These areas are important to daily living.

I feel that all these areas are important; however, to me, consumer homemaking education are very important to young people today. There isn't enough emphasis placed on any of the areas.

I feel there are good programs and poor programs in each area depending on the local situation and largely upon teacher initiative.

Opinions based on the practice as seen in various programs. Not familiar with aims and objectives.

Education in America connotes academics whereas the majority of students are not academically inclined. The opposite should be true in regard to the emphasis.

There is such a small variety of courses offered--regardless of quality the overall program is poor and needs improvement. Money first then the training programs.

The two that received no opinion responses I have no experience with--and my experience with agriculture education has been poor.

Our comprehensive program has proven itself to the degree that concrete results have been and are being attained.

Most areas above have teachers that are not properly trained. Most students assigned to these areas are students behind in academic achievement.

With good faculty members all of the above areas can assist students to develop their abilities in all areas of occupational education.

In our school, our occupational program is very effective and is reaching the students. I wish we could qualify for more cooperative programs.

I have had no experience with health occupations and vocational office education and do not feel qualified to judge. Either of the others above could have been checked very good in my opinion. In evaluation, many of them will reflect the quality of your teachers.

Depends on emphasis and cost per student--some programs receive flag waving treatment--others ignored.

These programs have produced for us.

In distributive education students not only learn or get job training, but they learn to dress appropriately. In the occupational home economics class that I know about students are getting good experience in the hospital. This helps them choose a vocation.

I realize the shortcomings of our own program!

Some type of occupational education is needed in order to meet the needs of our students and prepare them for a position in our industrial society.

Because of successful programs in this school and other schools.

I feel that our programs are reasonably successful in all areas; however, we need more programs and I'm sure what we have can be improved.

Health occupations is a widening field and technicians and technologists are badly needed in this area for research and therapeutic courses.

The above opinions are based on the responses of students who were previously enrolled in these areas and are now out of school.

I'm associated with teachers who take an interest in their classes and students. They work to improve both cases.

Not in position to observe carefully.

We are still fighting tradition in some areas. Basic feelings about specific programs rise and fall depending on the teacher in the position. Each of the areas has potential.

I do not possess sufficient knowledge covering the areas to judge their effectiveness in a community.

I feel that occupational education is very good for the students and that our schools are doing a good job in this area and that the future looks very bright for these areas.

These areas listed above include the component parts of occupational education. I have a good image of occupational education because of my experiences with the program in our school. I have observed the program in operation in our school and have been convinced that the occupational education program is very beneficial.

Those I checked good are the ones I am familiar with.

I feel that many of our vocational programs are not doing what they could in the area of student preparation for jobs--careers.

Took agriculture--see evidence supporting other areas.

I feel that the indoctrination of vocational courses may very nearly help a student to choose the vocation for his life.

In our area we don't have enough to offer the students--drop out rate <u>too</u> high.

My feeling is based on the fact that in many of our high schools they don't have the staff to implement the needed programs.

I think some of these need to be strengthened, and they will be, plus other areas, when the new schools open.

Agriculture taken by students not interested in agriculture. Home economics teachers (in this county) are out of step with the times.

I think that all the areas are good because of our diverse society and the many work areas.

I am basing my opinion on programs that I supervise. The majority of these would be good or better.

Occupational education is doing a much better job than credit is being given.

I believe that all of these areas are important to the child and each has its place in a school system.

In a changing world children need to be taught so as to help them to asjust.

Health occupations--since we must have healthy bodies to contribute to our society--we must know what to do to bring this about.

People feel that health occupations are more of a service than a means of making a living.

The reason I check no opinion for agriculture is because I feel this area has been over emphasized. It is my belief that students should be trained in occupational education--but the public should be made aware of its goals and objectives. Occupational education should be broadened to include other areas rather than emphasis on agriculture education only--should begin in elementary grades.

I feel that the program is not meeting the needs of the low income students and occupational education should be on the elementary level.

I feel that occupational education is helping to meet the needs of young Americans.

I feel that these areas are important because they meet the needs of many students.

A change in agricultural needs of this area has decreased the interest. The school has not changed fast enough to meet the new demands. Other areas are moving in the right direction.

Agriculture and home economics need to "gear up" more for specific job skills. Consumer and home arts still important but more emphasis needs to be given to occupational aspects.

No experience with agriculture education. Other areas are meeting needs of our area.

Provides an opportunity for the school to meet the individual needs of students; therefore, students can have experiences that provide for a better rounded education.

I believe any area of occupational education is well worth the time and effort it takes to present it.

With our space, our occupational education department does an outstanding job. Over 800 of our students are touched by occupational education during a year.

Have no experience with office education as such. Years and money wasted on agriculture education.

Too few teachers--too few facilities.

Agriculture department--better organization needed. Hope we will accomplish this.

I am very fortunate in having well qualified and interested faculty members teaching vocational subjects in my school.

I think we have a good program in all areas except health occupations.

Agriculture education has outlived its usefulness to a great extent due to mechanization. Certain specialized courses are still needed. Trade and industry is producing the skills which youngsters need for the labor market.

My opinions are based on very limited experience with these programs.

I based my answers on my general observations. Some schools do an excellent job in occupational education while the majority of them do a poor job.

Each of the following above should be stressed in occupational education because each student would have a chance to choose a career which would help him in some employment in the future.

We do a better job in cooperative areas than we do in others.

I feel that more emphasis on all areas should be placed at the junior high level because the basic curriculum of many junior highs do not meet the needs of all the students.

More effort should be put in the occupational area. The high school and school program in general is too much centered toward college preparatory.

We are not doing the job we are capable of in any of these areas. We seem to work ourselves into a rut and it seems easier to stay there than strive to get out. Poor employment practices dampen good programs in many instances.

There is a very strong need for occupational education to start in the junior high and elementary school. In our local there is a very valid need for a dynamic occupational education program--well thought out and planned. Now, I feel we give it second or last priority.

Professional Operators

I feel there is a definite need for trained people to work in all these fields. Maybe more so in certain areas, such as health, trade and industry and various other technical fields.

Homemaking is an area which everyone takes part in throughout life; thus, a course in high school should be of great benefit.

Facilities are not adequate--live projects and work programs lacking--well qualified teachers in our school with much interest in their programs and students.

I have worked in elementary education for the past 15 years. I am not familiar with current trends.

Those marked very poor are not offered in our school. Those checked good are offered and are carried out very well but all could be improved to be very good. Students have been successful at jobs related to the courses we have.

I feel that occupational education has done much for our students, and when this program is extended many more will benefit.

I really know very little about occupational education. I checked good on the areas I have heard most about.

I feel that a very good program is being carried out in the county at large.

Occupational education is still very young in our county but more and more people are beginning to realize that all of the above courses are supportive of gainful employment, where a college degree doesn't always guarantee a job.

I feel that occupational education is one of the greatest assets to the public school systems that has been provided recently. However, it is still young and there are many improvements in store for occupational education.

A school that is as small as ours has a very limited space and budget for the needs of the students. Our trade and industrial education program receives the most attention.

The teachers that we have are doing a good job, but Swain County is financially handicapped, and our students are not getting the variety of occupational education courses that they need.

I do not know enough about the home economics field and trade and industrial field to even attempt to evaluate.

This does not mean that I believe distributive education and vocational office education are not worthwhile. I rate them poor because these areas, in my opinion, are not developed very extensively.

Change is implicit in all ways of life. We must broaden our concept of preparation for a career from simply those skills required in occupations to an appreciation and understanding of the broad vocational areas from which the student chooses his career. More than one career, perhaps several, can be anticipated in a lifetime of work.

If these areas were planned in the occupational education program I don't believe we would have as many dropouts. It would lead to personal fulfillment.

Curriculum is well planned, executed and evaluated in these areas. Parents, students, and teachers help with this. Administrators have supported the programs.

The teachers are very capable and they do not mind going beyond the call of duty to help the student to attain the level of achievement that (he or she) desires.

I feel that all these areas are very good. We need a more flexible education for the young people. Training in these areas would give us a chance to offer them much more.

Need more space and teachers for areas in trade and industrial education. Funding and facilities are the main problems in developing programs.

We offer most of these courses in our school, and I have seen first-hand results. In my opinion, each course is adequately meeting the needs of the students taking them.

Personally, I am a strong endorser of occupational education. Should a youngster have academic difficulties in primary and elementary school then I think he should have some guidance and be encouraged to attempt one of the above areas of occupational education. No doubt he will be successful in one of the above fields of occupational education and mature into a useful citizen who will work with various peers through the years.

My image of each area above is based on articles I have read in the local paper and direct contact with distributive education students in local stores.

No occupational home economics courses are offered at the senior high level in our county.

Agriculture and homemaking have always been put first. The areas of health occupations and industrial education are very weak.

No occupational home economics programs are offered in our county at the senior high level.

Newspaper articles are in evidence. Communication about such is good. Individuals express approval at times.

Emphasis is being placed on all areas of vocational education. Plans are being made by leaders to develop the program at the local, state and national level so as to meet the needs of all students and to get the interest of the community.

The entire country should develop occupational educations training beginning with grade 6 through high school. More emphasis should be put on vocational education because many students, though academically talented, do not wish to go to college to become a professional worker.

As I have had no experience with the occupational education program, I have no facts upon which to base a specific opinion of any of the areas.

I believe in all of the occupational education programs and also believe they should receive equal consideration in planning the high school curriculum.

The "very good" and "good" images I have checked are for courses taught in our school--the "no opinion" images are for courses not taught nor have I heard much about them in meetings.

In trade and industrial education the students have been given an opportunity to do something concrete and will be able to use it as a means of earning a living.

I've checked the areas above because of the experience I've had in those areas and because of the curriculums I've seen in our schools today.

Vocational office education has proven beneficial in that almost all students are placed in office jobs or alse go on to a technical institution or junior college.

I believe those that I checked "very good" give all the students that are interested a chance to provide training for specific skills.

From personal experience I have found the agriculture education program to be worthwhile. It developes an awareness and appreciation of good farming procedures.

I feel that these occupational areas are preparing students to be worthwhile, contributing members of society.

I am not too well acquainted with the distributive education program.

Students have been helped a great deal by these courses. Students are very interested in these courses.

We have had vocational agriculture for years. We have a very good home economics department but it is not occupational. Our vocational office education, distributive education and health occupations are in infancy but are good. We do not have trade and industrial education.

To some degree, the areas that are good are the ones attended to, the others are seriously neglected.

I think that office training is probably taught adequately because many high school graduates with business training get good jobs after graduation. I do not think enough trade and industrial skills are taught.

I have seen satisfactory results of the areas checked "very good" and "good".

The home economics courses are extremely well planned and relevant. The transition from agriculture to trade and industry has brought courses that are too generalized which may change in the future.

I am not fully aware of the health occupations work in our schools, but it is truly a necessity.

I don't think agriculture is taught--more could be done in the other areas--office (typing especially) is emphasized.

I believe that our high school has one of the best occupational education programs in the state. The boys and girls are eager to learn, pleasant to work with and they want to stay in school. If they aren't college bound they can have something to look forward to in auto mechanics, brick laying, knitting, etc. Something they really want to learn.

The state of North Carolina has provided very good programs at high school and college (technical) levels for this training.

The areas of study are present and future needs of society.

Student response to these are good but I feel we can still improve our image and let the general public see that this program is good and very helpful in our community.

We have a strong faculty in all areas.

All of these areas specifically relate to an occupation after high school as well as necessary knowledge for everyday life. We also have to think about trades and hobbies for free time and retirement.

My feelings are based upon the results of these programs which I have seen, and they are quite good. We do not have (presently) an occupational course but will begin one in the future. I am not familiar with vocational office education.

I feel that the four areas checked as "very good" cover the needs of the majority of our students.

The occupational programs place a high regard on the development of the abilities of the individual in helping them to find a place in modern day life, occupationally as well as socially.

This is just my personal feeling that this school lacks a great deal toward the occupational program.

As an occupational teacher, I feel that they are all important.

We do not offer occupational home economics and there is a great need for it. If job opportunities are available in health occupations, there should be encouragement on the secondary level for vocational choices in this.

Occupational home economics with proper facilities available needs to be offered to high school students. Also, health occupations would be valuable. I know very little about the instructional program in agriculture and distributive education.

Programs I know about seem to be good--can use improvement but are doing adequate job with funds, equipment, and class loads.

These programs all too frequently require little attention and suffer from this--too little space, limited funds, inadequate time allotment and poor planning have all contributed to forming my attitude toward occupational training.

Every day each child is important yet each is different. These areas expose our care and spirit toward others who are our responsibility whether they are getting along with others or failing.

I feel this way because all of the above areas are so important in educating some students. Even though some programs may be less than ideal, the student does get on-the-job experience, which is invaluable.

I feel these programs give the students an opportunity to get a first hand experience before making a decision about what they want to do in life.

I feel the need for agriculture education in our area has declined and some of these programs should be changed to other occupational programs. Most other programs are good.

They are very good in the school in which I teach.

I think we are fortunate to have strong teachers in all the above departments. As a result, the courses are good and the students derive great benefits and training.

I feel that the distributive education courses in this county in particular are very poorly staffed and organized. The full potential of this course area is unlimited, if the courses are taught and used for the students properly.

I feel that vocational office education is very good because there is a growing need for sufficient and accurate office workers.

If these areas were added to the curriculum in high school, I believe it would help reduce the dropout rate. The students would also be better prepared to live in our complex society.

I am not qualified to answer any of the above.

Most area county schools have very capable instructors in specific areas. The thing needed most is more equipment in areas.

Having years of experience with children, I feel that a more fully developed area of occupational education will help both the individual and the community.

My image of the areas listed above is based on the experiences provided for the occupational students--boys and girls--in the school--grades 7 through 12--in which I teach.

I am using the basic image from the school where I teach. The distributive education and cooperative programs seem to be meeting the needs of the student as well as the community.

These areas are preparing the student adequately for the world of work.

Any area listed above will aid youths in making a worthwhile contribution to society.

I think they need the involvement of more students

These responses are based on my knowledge of the programs in the school where I teach.

They could be made available to more students and train them for a trade, not a work program.

No push--programs are generally mediocre--poor job of public relations--little support or encouragement given by administration to promote very good programs--no support given to occupational home economics or health occupation. Outstanding teacher has pushed consumer and home economics education.

Agriculture education may have improved since it was taught in our school. I have not been in touch with this program for several years. I have also had little actual experience with distributive education and health occupations in high school.

I have never seen any information on this type of education.

I believe the occupational education programs provide greater opportunities for students in the Elizabeth City Pasquotank school system.

Because of performance after graduation of those who have enrolled in courses.

The quality of instruction in any area depends on teacher qualification and support from all administrative levels.

Since I teach in an elementary school, I do not have close contact with this particular area of study.

I feel all of the areas are essential to our present society. I also feel that some are more important than others and more emphasis should be placed on them.

I feel that all areas are important because they are the needs of society and they broaden the individual's occupational range. They enable the individual to choose various occupations that fit the needs of today's living.

To my knowledge, our school (junior and senior high) occupational programs have not expanded to include health occupations or vocational office education. The other occupational programs listed are very progressive and considered quite good.

I believe each of the above courses are applicable to our time and each can train a person to some extent. Upon completion of the area of study one could gainfully be employed.

Each area has a place in the high school for each student. It makes the student find enjoyment in accomplishing something.

I have seen improved agricultural practice. Some agriculture students have built small scale buildings of good quality. They are showing know-how. Distributive education students have worked in my business. They are good.

My image of all of the above areas of occupational education is good. These areas help provide a way for students of high or low intelligence who come from financially poor families to find a place in society.

The above areas in most cases have so many job opportunities growing from them. We also realize that jobs are constantly changing and new ones will continue to be created. We feel that more emphasis should be placed in occupational education at all levels.

My opinions are based on the programs and personnel with which and whom I am acquainted at the high school level.

From personal observation, news media, and conversation.

This placement is based on wages, job opportunities, and working conditions.

There is such a diversity of potential and abilities, I believe as many areas as possible should be open to pupils for selection.

I think that as many areas as possible should be open to the people so they seek employment.

Students that are not planning to go to college can get a good job, if a good occupational program is provided.

I do not know enough on health occupations and consumer and homemaking education to make an opinion.

Need more facilities--in order to do a very good job--teachers must be on a 12 months job.

I have been to various workshops on some of the areas listed and worked closely with co-workers in other areas.

Agriculture and homemaking education, I feel, are out of date now in our high schools, expecially agriculture education. The ones that I checked "very good" prepare the students for jobs as soon as they graduate and most are well paid occupations.

I don't feel that instructors place much importance on health occupations, vocational office education, or trade and industry education. I have heard very little about any of the three in our county.

Greatest need for trained and educated farmers in our society is shown by erosion which is caused by poor land use usually by uneducated tenant farmers. Due to longer life expectancy, greater need for health related professions.

There is much that needs to be done to improve the program. I feel that the importance of occupational programs is being realized by the public.

I think occupational education is good but I think a person needs to be given special training in the areas.

As teachers we are especially interested in the types of habits, the efficacy of abilities, the adequacy of the information, and the worthwhileness of ideals, attitudes, and interests gained by our pupils because these are the results of experience. Education for occupations must be a part of the learning process during the entire educational program of the student.

I feel vocational courses touch the students to an extent but do not go into enough depth. There is too much emphasis on college. More should be in the vocational areas.

We feel that a program including all of the above areas will meet individual needs.

We feel that the above occupations should continue to be strengthened in order to meet all of the demands of society. They are needed to build a well educated society.

All areas are vital and necessary. Implementation of each would serve a real and meaningful purpose in this our changing and complex society.

Competent instructors--both academically and with practical work experience in their fields. Also programs are now getting adequate equipment and materials for relevant classroom training.

Many areas require advanced training and maturity of participants.

I do not know enough about many areas to have an opinion. In our county we try to have occupational home economics but usually the distributive education always get first choice. Our county has not set up a good program in home economics.

I feel the way I do about the above because I think occupational education has been a good thing in our educational system and should definitely be continued with improvements.

My answers have been based on the program that is being fostered in the school that I am employed. I feel that the program has helped students to think creatively and has broadened their intellect about the things they can be best fitted for.

Too little emphasis is placed on health occupations and occupational home economics. Both fields present numerous occupations.

Basically, I feel that all of the above areas are very good for the simple reasons that all the areas tend to develop a good pattern of everyday living whereby students can continually adapt to the various changes in our demanding society and yet keep up with the times and feel that their lives are of great significance.

Because I feel that each of the areas above are very important to the advancement of our society.

Because there are a great number of jobs associated with each area that can include the college bound pupil as well as those who may stop at high school or community college level.

All the areas above are necessary for a complete and total occupational education program.

I am a home economics teacher and I think we offer a good course in the various areas of homemaking. Also, I feel our agriculture program is good. Many of my girls have majored and/or are majoring in home economics in college now. Several are teaching home economics.

I am a teacher of home economics and I think we offer a good course. I also believe we have a strong agriculture course in our school. Many of my girls major in home economics in college or are successful in homemaking and have done very well! Same for our agriculture boys.

I am not knowledgable enough to answer or really have an intelligent opinion.

There are too many students and too much emphasis placed on agriculture education for opportunities in the field.

I definitely feel these areas are essential for the building of the student's future.

Agriculture is very important to our state and this is why we need new and more people going into this program. All of the above are very important in our community and we need more people to up-grade their occupations.

Occupational training is preparing students for a wide range of jobs. The student is able to be creative and develops an awareness of himself and others.

There is not enough of the above mentioned specific areas taught in our schools to create an image.

I have seen students benefit from this area.

I am not that familiar with agriculture and distributive education. I have been associated with homemaking education, have studied and researched occupational home economics. I have worked in schools which have the latter two; therefore, I am familiar with their offerings. Over all, I feel that occupational training is important--that students can be enriched by the programs, if programs are conducted to meet student needs as well as employment needs. I do feel work experience in various occupations is essential for the instructors teaching such courses.

The areas listed above provide learning experiences that can be applied in daily living, and offers early training for many vocations.

The reason I feel as I do about the above areas, I have associated with people who have worked in these areas.

I definitely see a worldwide need for training in these specific areas.

I am a little doubtful about the actual opportunities offered high school students for trade and industry education. This is a field in which strength is needed.

None of us truly know much about success of other teacher's programs.

In recent years I have seen entirely too many untrained persons teaching occupational courses, with very poor results, in the name of occupational education. This has been especially true in trade and industry courses and distributive education. The concepts of these courses are good but there seems to be a total lack of unity or coordination in the way they are being taught in many of our schools. Much of this confusion and lack of direction I attribute to the fact that it appears that any one can easily get on this type of payroll. Properly taught and supervised all of these courses have much to offer practically all students. Unfortunately, in the past few years, entirely too many funds have been channeled to programs without depth or purpose and useless supervision on the local, district, and state levels. Unless some changes are made in personnel and policies in occupatinal education in North Carolina, we'll soon have no programs because the taxpayers of this state will be completely fed up. Recently, the emphasis has been on publicity instead of results in too many cases.

My son had one year of agriculture. I considered the course a poor joke. My daughter had one year of home economics. It was an excellent course--I am impressed with the fact that she learned to sew. At the school in which I teach, we have consistently had outstanding industrial arts teachers and a really fine program which I feel would be beneficial to every boy and many girls.

Our program in office training has not yet been established. I do know of other programs that have had excellent results. We have masonry, electricity, data processing, agriculture, distributive education, home economics, graphics--I feel these programs are the best inducement for school age children we have.

There is evidence that those checked "very good" are involved in educating the individual and in interpreting their work to the community. Health occupations is nonexistent in our county, and I feel that there is a great need for it. Research show this also.

Occupational home economics--"good"--because students have the opportunity to learn by doing in most areas.

Teachers in local schools are limited in ability to judge, and image may be based on their image of teacher rather than success of course.

Occupational education needs more publicity to help make a better image with the general public and the employers in that area.

I have seen these courses make a difference in the lives of students whom I have known. They provided motivation and hope for the students. They are very worthy areas.

This particular community seems to be aware of most of its needs in these areas and is trying to improve through education courses offering the young people a choice of desirable occupations (in this area).

I do not feel that I am well enough informed on most of these areas in high school occupational education to have or give an opinion.

We have no occupational courses in our school but I am eager for them. I think occupational courses are just beginning in most high schools and need our full cooperation.

I do not favor occupational education at the public school level--industrial arts which introduces the student to a broad spectrum of occupations and industries is preferable. Specific job education is best handled at the community college/technical institute level.

I feel like the job done in trade education is not as good as others. The others might be more attuned to needs.

I feel that occupational education is in its early stages--we have a long way to go in developing a suitable program, but we are doing well--we need money and manpower.

I feel agriculture and home economics education in our school is good. It could be better but on a whole it is good.

I have seen these students successfully at work in their trained areas of work. They also seem very enthusiastic about their work.

As a COO coordinater, we train for mainly terminal education. I can get jobs for my students and they must have the needed skills and attitudes to keep their jobs.

I feel the trade and industry education is very good because it is good for the academically talented as well as the other students. This area may serve as a hobby or as a means of occupation.

Parents

I feel that occupational education is very important but I also feel that the student should be adequately trained in a particular field which will enable him to make a good living.

All of them are learning experiences. They are very helpful now and I'm sure they'll be even more helpful in the future of our young adults.

There is not enough taught about health in our high school.

I am not familiar with the specific areas of occupational education therefore I cannot justly rate the programs "good" or "poor".

Being a rural area, we need to emphasize the future of farmers since they are the backbone of our economy. Everyone cannot be a white shirt worker. Someone has to provide for mankind. More boys should be encouraged to farm.

I feel this way because I think that it has helped children get jobs and become more interested in staying in school. It helps the children to want to get something out of life and to want to become somebody.

I feel that this helps my girls to understand the world better.

Clayton doesn't offer agriculture education.

All are essential.

The agriculture education that I received in high school over thirty years ago has helped me through the years.

Have had no experience with any of the above.

My experience with printing courses show that the courses are largely ineffective in supplying needs of our industry.

I feel that the distributive education programs prepare the student to have understanding and knowledge of hard work.

Occupational education in Camden County is insufficient because of lack of funds in this county.

My son has taken occupational courses at school, and I know they have prepared him for college and a prosperous career in life.

Distributive education and office education are the only areas I have had any contact with.

Students in lower income levels are given distributive education placements because of financial needs rather than experience or desire. Most students take ANY outside program offered as an escape from school rather than wanting work knowledge in a particular field. Employers are most hesitant to hire young people because they are inexperienced, have not completed military obligations, probably will get married, etc., etc. This is most discouraging to young people seeking employment. If young people could work in a field of their choice at interesting occupations to them, perhaps the work force change over would not be as great. And paid at least minimum.

I feel that it is very good for the students to learn more about different occupations and trades, especially ones which concern the average person.

Students in distributive education are at least exposed to "on the job" training. Their own attitude determines whether they gain anything from it.

I feel that all these courses are very good because the courses can help you in the future whether my child or anyone else goes into a special career or not.

I don't think some of the areas have been explored and expanded enough.

My reason for selecting the way I did is because I think that they are helpful in preparing the students for the outside world.

I think trade and industrial education is good because everyone needs to take up some sort of trade they like. I think it will satisfy them to know that they are enjoying the work they do.

I feel all of these are very important in a person's life if they are going to live a well rounded and productive one.

I think that if the student wants to go into any of these fields, it would make it easier if they could learn about it in high school and junior high school.

I feel occupational education will benefit everybody in one way or another.

These help to teach the public about important problems.

They are good because the children have the chance to try different things and to learn from experience.

I feel like Knapp School has a very good trade and industry education program and a wonderful teacher who is interested in all his students.

Students should have knowledge about these different areas you have to offer.

Limited money, staff and opportunities hamper the best of intentions.

In my connection with vocational office education I find that many students are being well prepared for office jobs across our state.

These specific areas of occupational education are needed in our area for the future of our county. Our boys and girls need this training.

I feel this way because more occupational courses are needed for today's society.

I think the programs can be very useful to the students.

I believe that in Cape Hatteras School if trade and industry education was implemented more students would finish high school and be able to find work here and away.

Without the background of these studies it is harder to persue them, also if a child has these in high school and goes no further to educate himself, he still has something to help him in personal and public living.

I am not that much aware of the occupational education as it is today. I don't think there is enough publication on what it has to offer.

They have too much of one thing instead of a variety of all.

Most of them are those that you can get an easy (easy to obtain, if you have the knowledge) job.

All of these areas are important to society; each contributes in its own way.

More specific training needed in all areas.

The FFA is a good help for the agriculture. For trades, courses my son took helped him a lot.

Occupational education courses are helpful to students who do not have an opportunity to go to college, also helpful to those who go to college in deciding on their major.

Not acquainted with occupational home economics. Other occupational programs prepare young people for work in the community if desired and also prepare them for further study in college or technical school.

There are no programs here which would help students if they are interested in a health occupation.

All good training for students to prepare for better jobs.

I have seen results from all areas listed above. It is my belief that voactional education is not only for the under-achiever but for any student interested in preparing for the future.

I do not know enough about these areas to base good opinions.

If we have the right training for all the above our children would be better prepared to go out into the world after high school and would want new training for the future.

Helps the student to go into special field.

The young people in this area need occupational education to be able to make a living.

More emphasis is placed on agriculture, and office education than any other form of occupational education; therefore, we have better programs in these fields. Home economics is a large unit also.

It gives all of the students a chance to do something they want to do. I think everyone should have a chance to do something they want to.

They are all needed for training in specific areas of job.

I think that Lillington is as good as most schools around, but most all areas can stand improvement.

Lillington high school faculty are doing an excellent job. Even though we have inadequate building and equipment, our program is making forward strides, the student takes pride and management in this area and appreciate the program.

I feel that we have been fortunate in this county to have had county educators and school administrators that have been looking to the future in the area even though there is a tremendous amount of work yet to be done.

I feel that we in Harnett have been fortunate to have quite a worthwhile occupational program. The administration and teachers have worked very hard to intensify the occupational program.

There is such a little occupational education in our school in this county, one cannot form an opinion.

The educational programs listed above are well planned and fill the needs of the students.

Because school does not put enough emphasis on health occupations.

Agriculture ranks as one of the world's most important industries. Although one's impression of agriculture might be farming--and farming could well be considered the background, the nation-it covers so many other segments of man's environment and supplies most of man's food and materials to make many products.

They deal with all areas of occupational education, which gives the child a better chance to prepare himself for the future.

The areas listed cover the various phases of occupational education--thus giving the child opportunity to become aquainted with the world of work on which so much emphasis is now placed.

I realize that <u>all</u> are necessary, am concerned at the generally poor opinion of farming in this country today. Even a fool should realize that someone has to plant the seed, till the crop, and harvest it. Slop the hogs and do the other dirty work, and that people who choose to do this are not necessarily unable to do grander things: A healthy agricultural economy means a healthy national economy--<u>we all have to eat</u>. Also, I fear that the necessary occupations of trade, industry, etc. have been de-glamorized in the public eye, to the general detriment of our quality of life.

I feel that agriculture is far below the standards that it sould be. There should be more organization among the farming people.

Leading industries in Duplin county are agriculture-related, but no courses such as poultry and livestock, agriculture business or others leading toward these careers are offered.

They all help my children in preparing for whatever career they choose whether business or just a homemaker.

The areas mentioned above have helped students in becoming worthwhile citizens.

Any good training a child gets will be of help to him. You can't get too much education.

Know some of instructors, and believe they are doing good job.

Not enough money and manpower.

Each of these specific areas of occupational education can be of tremendous benefit to children from every level in our area.

Need more.

These areas are good in that they reach a large section of students with varied interests and ideas.

It is good for their education.

May I say--occupational education should include many more areas of occupational training. I answered this questionnaire as if a proper occupational program were carried out for all students who wanted to participate. There is no such program in our school system in Forsyth.

I have very little knowledge about some of these courses.

Help them prepare for what there is to come in the future.

The listing above might help my child in finding a proper job. Even working at home they are good to have around. I hope she can learn all that is possible for her to learn. And that it might be offered to all students.

I check them all because I think they are very good for the children.

I have children in school and three of them have already participated in occupational education, home economics, and agriculture education. I have worked and am now working with distributive education students and they make good employees. I have helped in some of these areas.

Because students who are not able to obtain a four year college degree would benefit from an occupational career.

Some of these areas are emphasized more than others. We have very good teachers and do a good job teaching those subjects I checked "very good". The others I know little about.

They have good objectives.

I feel that occupational education is very good for any student. It provides a wide range of job opportunities and training for specific skills. I have personally benefited from my training in my trade and business.

My favorable image of the area of health occupation opportunities is probably based on the number of skilled and semi-skilled job opportunities in the fields of mental and physical health programs and services which exist or could exist.

People in the rural areas benefit from the agriculture and home-making programs that are put out for them.

I feel as though all occupational courses should be in school. I feel they help a great deal.

Training in our local high school for occupational education has increased in the last few years. In my opinion it could increase considerably.

These agriculture and home economics are geared to personal use and not for purpose of an occupation for earning purposes. Occupational education and trade industries, the person is ready for beginning level work.

I feel that my children and other children can gain from them.

I believe most of these courses are important for the students of today. I don't know much about distributive education and trade and industry education.

They all help some of the needs of students. They help the student in becoming adults.

It is good for a student to take the subject I have marked to help them in their homelife, and the understanding of the fields they want to enter after their schooling.

All of these give a student a way of life with or without a college degree.

They prepare students to find a place in society, fullfilling a job that can be beneficial to all concerned.

It has helped lots of people who could not help themselves. And made better young adults of those that could have made out.

I feel we have a well balanced vocational program in our county at the present time. There is still need for improvement and additional new programs.

Home economics classes fine. Typing class helps. The other I hear little about it.

Occupational education programs teach skills needed to help students leave high school able to find a job and make a living; emphasis is also placed on "living."

Distributive and vocational office education provides students with experience and possibly permanent jobs.

Having listened to my children who have been enrolled in such courses, and, too, knowing their profit from these courses, I actually feel these areas to be as checked above.

I am not familiar with most of these areas. I have had children involved in the ones I checked "good" and I feel it helped them.

I think that occupational education programs are good for students.

I feel the areas in our school are too limited. What we have is good, but facilities, equipment, and lack of adequate number of courses and teachers is a handicap.

I feel that we have students and adults who can do better the things they would ordinarily do if they are exposed to these areas.

The occupations marked "no opinion" were not fully understood. I don't know enough about these. Don;t know enough about the occupational program as a whole.

Since we live in a section of North Carolina where the soil is rich and fertile, I believe there are many opportunities connected with agriculture, through the vocational education programs, as well as trade and industry education.

If a student is interested in any of the above it is a very good opportunity to start getting this in high school, then if you are really interested in this and want further education you are already prepared for what you want in college instead of wasting a year or so deciding.

I do not know much about any of them but I feel that they have been needed in our schools for a long time.

I feel that in the field of health occupations, we need more people interested to help overcome the health problems of society.

Some of the areas that I am familiar with are helpful in teaching people things that are necessary in everyday life.

I feel schools generally in the United States are inadequate when it comes to vocational courses. In our area it is very poor.

In our county the above courses are of great benefit to our students. Many are unable to go to college and our vocational courses enable them to be useful citizens.

They are helping the students realize the potential they contain and many times helps them determine what job they are best suited for.

All occupational education programs are important and necessary for boys and girls who must later on make a living for their families. Women that are just homemakers need some of these programs to make a good home for their families.

We have no health occupation in high school--agriculture and home economics have been the favorites for years; distributive education and office practice are beginning to catch on.

I think we have well qualified teachers and they are doing a good job.

I either know or am involved with these courses, the people who take and teach them. I see how they have helped and I think it is great!

My children or friend's children have taken some of these courses and I feel they have had good preparation for their occupation.

It enables the student to know what they want to do when they get out of high school.

We need more of some of these to better our city and state as a whole; using agriculture education as an example.

Lack of information beyond present planning in county system for textile orientation.

I have seen students who take courses in these areas improve in their abilities and images of themselves. Also many have chosen careers as a direct result of their experiences in these courses.

I know of students who have taken trade and industry education and have good jobs right out of high school--such as printing and secretarial work.

I have a daughter in home economics and she is interested in office work.

All students, regardless of scholastic ability, should have some training in all or part of the above topics.

They prepare students for the future. I think more occupational education should be offered.

It gives a choice for those who might prefer different trades or business.

I feel that a stronger effort on the part of administrators is needed.

I feel that agriculture education, distributive education and trade and industry education have made the most progress and have done a better job of selling the public on the need for training in these areas by actual successful performance. Occupational home economics, vocational office education have also made progress. I know very little about health occupation and consumer and homemaking education.

I think some children can't learn as fast as others. Some of these things should help them to get a job.

I have observed the good jobs acquired by the office education classes and have worked in the summer with some of the girls from the health occupations class. Two of my daughters have had one home economics class each and had good opportunities for learning in these classes. If the other home economics courses are this good they should be classified "very good". I have had no experience with the other areas.

I feel that all this training gives our children a better chance in life to make them better leaders.

My high school child has benefited very much from her two years in home economics classes.

It maybe would help a student decide his or her future.

I feel that the vocational programs in our particular school are good. It is fairly new and is attracting a number of students, many of which might be drop-outs without it. We have no program in health education.

Could be improved, but I feel like it is probably average in our area.

Consumer and homemaking education, I believe, helps girls be better wives and know how to manage a budget and how to make the most of what they have.

The local students with whom I am familiar in the fields of agriculture education, health occupations, and vocational office education seem to be quite well placed in their various fields. I feel that it is due to their local training.

Because it introduces young people to the world of work and prepares them for the future.

I've worked with these teachers and students and think they are doing a good job.

I have heard very favorable comments about the home economics and business courses offered at Hudson. Students who have taken agriculture and distributive education have seemed satisfied with the courses. I have heard little comment about occupational home economics and trade and industry education. I have never heard any comment on health occupations.

Instructors aren't properly trained--too many students per class to receive necessary training.

Although occupational education is not broad enough, what is being offered is good.

Occupational education can provide each student with a chance for job training. Today, because professional jobs are being filled, the trend is turning to vocational and occupational jobs.

I am uninformed about some areas. Other opinions are based on newspaper reports.

Because there isn't enough information to the public concerning the area of occupational education courses offered at the school my daughter attends.

I don't know very much about this, but I do think we could have a little better health education.

I feel that a lot of students are being helped a great deal by the occupational education courses offered, but I do feel there is room for a lot of improvement.

All areas listed above help our students find an occupation that is really worthwhile and gives them a feeling of security.

In small administrative units such as Clay county, the state should provide more funds so a varied curriculum could be available.

Each of these help students develop themselves and prepare them for work in the future.

Students

All occupational education is very necessary, I feel. It helps the person get on-the-job training and experience and classroom activity. You could not obtain this anywhere else without occupational education.

Mt. Airy high school has a very good program in all these areas except agriculture because the school is located in the city.

I think health occupations should be emphasized more considering the health problems of today.

I do not have any idea about consumer and homemaking education. I feel that any of the above are in excellent condition if the students and the teachers can get along and accept one another. I, too, feel that office education is very good.

The educators for agriculture and home economics at our school are very qualified and encouraging. There is too little emphasis placed on occupational education here and too much on college status.

I feel that all students should know and take an occupational education course because it prepares them for a job or further education.

I think that most of them are good because they helped me get a job in a factory and I like what I am doing.

I don't have an opinion for the agriculture education because I don't hear enough about it but the office education is what I hear most students talk about.

I feel that the above are all good occupational courses and would help a young girl or boy to get a good start in life after graduation. Health occupations I don't fully understand.

In my school there is no help or courses for those who wish to work in agriculture, health, and occupational home economics.

All of these areas prepare a person in high school to go to work after school.

In my high school I have seen that these educational opportunities have been fulfilled and many students have benefited by them.

As a student having had contact with many of these areas through personal experience or by other means, I truly believe these areas to be as indicated.

Programs can be very useful to the students if used in the right way.

More emphasis is placed on agriculture and office occupations than on any other form of occupational education; therefore, we have better programs in these fields. Home economics is a large unit also.

It gives all students a chance to do what they want to. And to be interested in something they like.

The areas in themselves are good and perhaps very useful. In the courses rated lower than the others, the only reason is that the instructor isn't doing his greatest effort for the course. The vocational areas are well balanced.

The homemaking educations are not as helpful as the others.

We have a typing class. Also, all girls are required to take home economics. All boys take shop and home economics.

Many of these I know nothing about. The others I have had some experience in and they seemed quite satisfactory.

When I took agriculture, I had a chance to learn by doing in the outdoors and shop. Distributive education needs a new method of teaching. Others are taught very well.

I feel that these programs are good because they prepare a student for his chosen field. Students gain experience through in-school and on-the-job training which is very helpful when looking for a full-time job.

The reason why I feel that the first three are poor is because we do not have them in our schools. The other ones can stand a great improvement if they wish to prepare the students for the outside world.

At our school we have a really good system of these areas I have checked above. I feel that each teacher is very well qualified in their field to offer top grade training.

I think anything is good if it will help someone. And I feel like these courses do help people.

I checked all of the above either "good" or "very good", because I feel occupational education is needed by students who do not plan to go to college.

Since I have never taken very many occupational education courses, I really do not know much about the various areas.

I am very interested in some of the things below because I enjoy office work and home economics. I am seriously thinking of making one of them my career. These subjects will definitely help somebody.

Agriculture education and health occupations are needed. These are mostly concerned with farming and nursing.

I feel that every person should take at least one of the above courses, so at least they will know how to do at least one thing in their life, in case of an emergency of some sort.

We need agriculture education. It supplies us with so much food. We need health education to ehlp people live longer. We need home economics to see that we do this right.

They do not have a wide variety!

I think that you need most of these. It depends on what you are going to do.

I enjoy very much distributive education and home economics. In distributive education I have learned a lot from my work station and from my class. I enjoy learning and meeting new people. I have always liked sewing.

I think agriculture education is good in that the boys are in the major agricultural fields. Also, distributive education is fairly good but I'm not interested in the field. The others are absolutely great.

I think trade and industry education prepares students for a job which will be helpful when he or she gets a job.

No hospital can function without workers trained in health occupations.

I feel this way because the programs at this school develop good character toward occupational education.

I think that the agriculture education is an excellent one in this area.

I think they help the students a lot.

Because I believe all of the occupational education programs are very important and help you in today's world.

Office education courses do give a student a source of capital to further his aims in life.

I have observed this in my own school and most of the occupational training programs are good.

All of the areas above are very good at my school, because of the wide coverage of each course.

Trade and industry education is very good. I am very interested in an auto course.

Because it can train people for jobs that they might not have money to get training for.

I think these courses help students decide what to do after high school.

I think that they help the person find out if that is the kind of work they really want to go into.

I feel this way because some of these are more needed in the city which is where I live and can be used by city people.

Many of them are not taught in this school

The four I checked "very good" are four programs of which I have heard good reports. They offer thorough training on a variety of occupations. The others I am either less certain of or have no knowledge of or have no knowledge whatsoever of them.

My school doesn't have an agricultural program or homemaking but the others are good programs for today's needs. The distributive education program lacks good, interesting study material.

The reason I feel the way I do about distributive education is that I know that there isn't enough discipline in this program (the kids use it for easy credit.)

I feel that home economics is very good in our school. It helps girls learn the values of living and how to get along with other people as well as how to be a good homemaker.

I think some students would benefit from taking the above courses; however, I feel that most students learn these things in the home,i.e., homemaking, health, and home economics.

I favor vocational office education because it is something I've been involved in all my life.

I think there is too much emphasis on college students and not enough on the "working-class-to-be." Not all students can go to college. We need preparation also.

I feel that occupational courses do not have enough equipment to keep the student interested or enough different courses to choose from.

Today you can find pretty good jobs and you can make a nice amount of money off of these jobs that are listed. I feel you need good training also.

I think that all occupational education is good. They help you prepare for future careers.

These courses help a person decide whether or not he or she likes that field. If they do, they may go into that field of work.

As much as I know about these fields, I feel that the school offers the best it can with the funds it has available.

I don't know much about agriculture. I think the ability to be a good homemaker is the most important thing a girl can learn, second to a college education.

As a student most of these areas of occupational education appeal to me.

Some of these programs need better funds and better qualified teachers.

They all give the students different training. Students learn easily by taking these courses. The courses are not hard and you have a big variety of things to do.

I feel that there are too many people thinking that college is the only answer. There should be more occupational courses taught in school. There is much need for all of these courses.

Other members of my family and I have taken occupational education courses and I feel they have been a great benefit to us.

Distributive education is very good at my school because the teachers are involved and are able to get across to the students easily.

I know some of the students involved and seem to think they are getting something out of it.

The occupational programs are good for boys and girls. If they can't go to college these are training them for jobs.

Distributive education is very good because it teaches you about handling a job, selling, etc.

Agriculture education is very useful in this part of the country. Distributive education is very helpful. It helps the people around here get jobs when they really need them.

The programs that we do have appear to serve the interests of the students with the exception of consumer and homemaking education, which is not stressed.

In the school I attend these programs are good but nothing special.

In the future it could help each and every student who takes the course.

I think that a person can excel in any of these areas at school if he is really interested, and all of these areas prepare a person for future jobs.

I feel that occupational education is better in many ways than the academic education.

The home economics, vocational office education, and trade and industrial education curriculum are nothing absolutely extraordinary, but our school's facilities are quite adequate. The agriculture education, health occupations, and homemaking education programs seem to be meeting the student's needs very well, but I do not know enough about the distributive education courses to make an intelligent comment.

The home economics department needs to be set up better .

Most of the teachers do not control their classes; the students loaf around like it's a free period. Very unorganized, needs better planning.

Homemaking is the only course that I am closely related to at this time. It's the only one I can honestly say is very good.

I feel that all of these courses are very good because they can help you in the future whether you go into a certain career or not.

I think agriculture education is good because this county is primarily agricultural. Homemaking and home economics are also good for girls who are planning to run a household.

I feel that subjects related to helping others in need, such as health occupations, are very good.

The majority of the students at our school take some type of occupational education course. The facilities here are very good, which encourages the students to take these courses. I am strongly in favor of occupational education.

I think the most important is health occupations, because it is very important to the health of all people in every community.

I think occupational home economics is very good. It gives students ideas about spending and budgeting, etc.

I feel that certain students want to go into these fields or have an interest in them and unless they are offered some students will feel deprived of studying for the type of job they want for their future and might go as far as to drop out of school.

I feel that it is better to learn and practice what you want to learn than just read it and forget it.

Basically all of these areas are good. They all have good points that alot of students are interested in. Most of the time classrooms are so small that only a limited number of students can get into a class.

I think that all the ones that I have come into connection with are helpful to students, especially health, agriculture and consumer and homemaking education.

I feel that these occupations will help students in high school get ready for a college education. I hope that more schools will teach them.

Homemaking prepares you for things that might occur in a fresh marriage. Vocational office education helps you understand the feelings of society.

I think that occupational education in the field of agriculture is fairly good in the state of North Carolina since agriculture is an important part of the state economy.

They help the student to find a place in society.

I feel that there isn't enough emphasis on health occupations because it is only required in 9th grade. I think that it should be taken and required every year.

The homemaking areas are very good for an area this small but could be better.

The occupational courses help students who are not going to college prepare for a job.

I think that our occupational home economics class is very good because we have a well-organized class and a competent instructor.

I think that our high school has a good occupational education program. I have learned a great deal and have enjoyed the courses that I have taken in occupational education.

I feel that students in grades 7-9 should be better told what occupational courses are and what they are intended to do for them.

During my last year in high school I have been taking a vocational office course. From my experiences in this course I've found that I don't like this type of work.

People should be taught how to work in high school so if they don't plan to go to college they still have a good background.

I feel that the above areas are a good way to learn about the different types of jobs. They also help you to get a decent job after you're out of school.

The above occupational areas help the student to decide whether or not he has the abilities to enter a specific field.

I think that health occupations should be taught in school to help students understand themselves better.

Camden schools lack in many areas of occupational education.

I feel most of our programs are good or very good for the materials and number of teachers we have working in these areas.

These are needed to help students prepare for their adult life.

Classes are crowded and not enough special training is offered.

Many students are involved in these programs and enjoy as well as learn.

I feel that these will help people economically.

Home economics is useful in married life. I don't think enough information is given about occupational subjects.

Farmers are growing fewer and fewer crops each year. Each girl will become a housewife and will need to know some home economics.

I feel as I do because all these courses have a good name for themselves at our school.

I feel that more stress should be put on farming. Increased population causes a need for more food. Now people move to the city for jobs and they are unconcerned about agriculture.

The reason I feel this way about these areas I have checked is because these courses have enabled me to enjoy high school. I enjoy attending high school more than I thought I would. I strongly feel that these courses will help me in the future.

I feel that all vocational courses are good but some are less important to me.

These areas give the student a chance to test a certain career without making any permanent decision.

All of the areas listed above are vitally important to every individual in the world.

I feel that occupational education needs more response from the taxpayers. This type of training is needed by every young person plus older ones too.

I do not know much about any of these programs but I personally feel that an emphasis on college is not right for the majority of students. More occupational training is essential to the educational process.

I feel the way I do towards each of these areas because they are a great benefit to most of the people in our county. They are a learning experience to all concerned.

Each of these areas should be excellent if the training and facilities are as they should be. More emphasis should be placed on this type of training.

I really am not that well informed about the occupational education facilities in my county.

I think distributive education is very good. It gives students an opportunity to train in all fields of education.

I feel this way because occupational education is important. Everyone considers college but sometimes you can't go. These courses will give you the skill and training that you need to pursue a geed job.

I feel that all of the above are important to our community.

I think all the occupational education programs are good, especially home economics.

With the variety of occupational education courses offered in schools, students are given early training in the field they wish to enter.

Today too many students feel that they must go to college in order to get a good job. Occupational education gives each student the chance to train for a good job without college.

Health occupations is not widely taught in high schools.

I feel that there isn't enough information concerning the above areas.

It is nice to have the kind of education that meets the needs of the students with their future jobs.

I don't think health occupations are stressed enough in our area.

I am interested in most of the above areas and feel that they prepare the students for a certain field.

I think that all areas are good because the student learns by doing and learns things that really pertain more to life.

I think that agricultural education is very good because you should know about agriculture. It provides food, clothing and shelter for every person on this earth.

I feel that they may come in handy in life. No matter what job I take, these things will help me do better at my job.

I think that the most important area to most people seems to be vocational office education because it helps to train our young people for useful jobs.

I feel as I do because all of the areas prepare you for future life. Every individual has his own need for fulfillment. These occupations supply the need for some people, for others college is the need.

I don't know much about some of the areas listed.

I think that all of these courses are good and are needed in high schools to prepare students for work after they graduate.

I believe that each area of education is of importance because people of today really don't know what field they want to work in so we need to learn a little about each of these areas.

Most of the above areas can be learned in the home or from someone else.

I feel that all of the areas above help students in some way.

I think occupational education is good because it prepares people for jobs after they finish school, no matter how far you go in school.

The classes prepare students for what they may encounter on a job, but alot of things one does on a job are not taught in class.

Business & Industry Employers

I know very ltiile about any of the above except trade and industrial education.

I have employed students through distributive education programs.

I am not familiar enough with these areas to give answers.

Needed changes are not always made when needed. Broad training can be more helpful than specialized. Attitude training seems to be ignored.

All of the above areas are excellent to have available at the high school level, but I feel that most need improvement at the administrative level. Distributive education is an excellent program but needs closer supervision by the D.E. coordinator.

This program is a "Head Start" program to take care of incompetent educators that are not qualified to otherwise make it in any other field. Put the incompetent ones on welfare and get some competent ones.

In the trade education area the students are given good fundamental instruction but do not receive enough orientation about what makes a good employee.

Alamance County textile employers pay a large portion of total county taxes, provide 83% of total manufacturing employment, yet there is no textile vocational training in either city or county schools.

Strong emphasis on college preparatory work in high school relegates occupational education to step-child status.

Do not feel that the public schools are tuned in to the needs and requirements of today's society.

Not too informed on programs in local schools.

No opinion on most as I know nothing of these. I feel that we are too oriented to education.

Public hasn't been made aware of full advantages and capabilities of occupational education. There is much need for wide publicity. In this county a small percentage can go to college. Occupational education is the one thing most needed.

I think they could have more specific training in areas such as textiles. Students need lab work and more exporsure to industry.

We employ 150 people and we have never had any contact with anyone in industrial education in our community.

It is my opinion that occupational education fills a real need in this area.

I think public education in North Carolina is a flux. Eighty percent of the curriculums are academic in nature but 80% or better of the students are not college bound. I am speaking from four years of experience in North Carolina public education. Give a kid a tangible education and he will reward himself.

I am not in a position to know much about these areas.

I have had little contact with occupational education projects.

This chemical manufacturing plant employs about 20 people among whom none have had high school industrial education. One man did get worthwhile training at a technical institute.

Perhaps I do not understand them as well as I should.

The very poor and the very smart are taken care of. The middle group have to look out for themselves. They are the group that need help.

The only ones I've had contact with are distributive education and office education. I believe that the teachers do a very good job.

We don't believe that it has been much help.

In all honesty I have had no contact with individuals who have had occupational training.

I feel the people involved with occupational education are extremely important. Too much emphasis is placed on academic preparation; however, I feel this is changing. Would like to see more emphasis on attitudes.

I feel that most high school students no matter what vocation they enter could receive good training from any of the above programs.

The coordination of office and industrial education requirements with industry could be improved.

I have very limited experience with students who have had occupational training of any kind.

We work as many of these students as possible while they are on the school program. Have been satisfied with attendence and performance.

I don't have contact enough with occupational programs.

I feel that on-the-job educational programs lead to well-rounded, knowledgeable employees.

I feel that our local schools are doing a good job in these areas. They are striving to make the programs stronger and even more meaningful.

General Public

We need more available subject fields and in some cases more sections of the same course.

Opportunities are still too limited in all fields.

In Chapel Hill occupational education is generally poor. In other Orange County schools it seems much better.

General opinion with little specific knowledge of what is being done in the local schools.

In Scotland County we don't have the proper facilities or personnel to have a good occupational program. I think the State should push this program.

It is my understanding that Nash County has better occupational education programs than any other county in North Carolina.

I am not familiar with present local programs but feel that they are too general and are not given emphasis needed to prepare non-college students. Programs also lack prestige.

The general public is not aware of our problems and could not care less. There is lack of proper equipment for some of the courses.

I feel that all of these occupations are very vital to our growth and to the future of this country.

I feel that students should be offered a trade in various fields because so many cannot further their education after high school.

We have very dedicated teachers in these fields and they are very concerned about their students and want to see them well prepared to start out on their own.

I feel like all high school students are not college material. Therefore, we must have occupational programs that must be available for these students to learn a trade in order to get a job.

I am not real familiar with the present school stiuation.

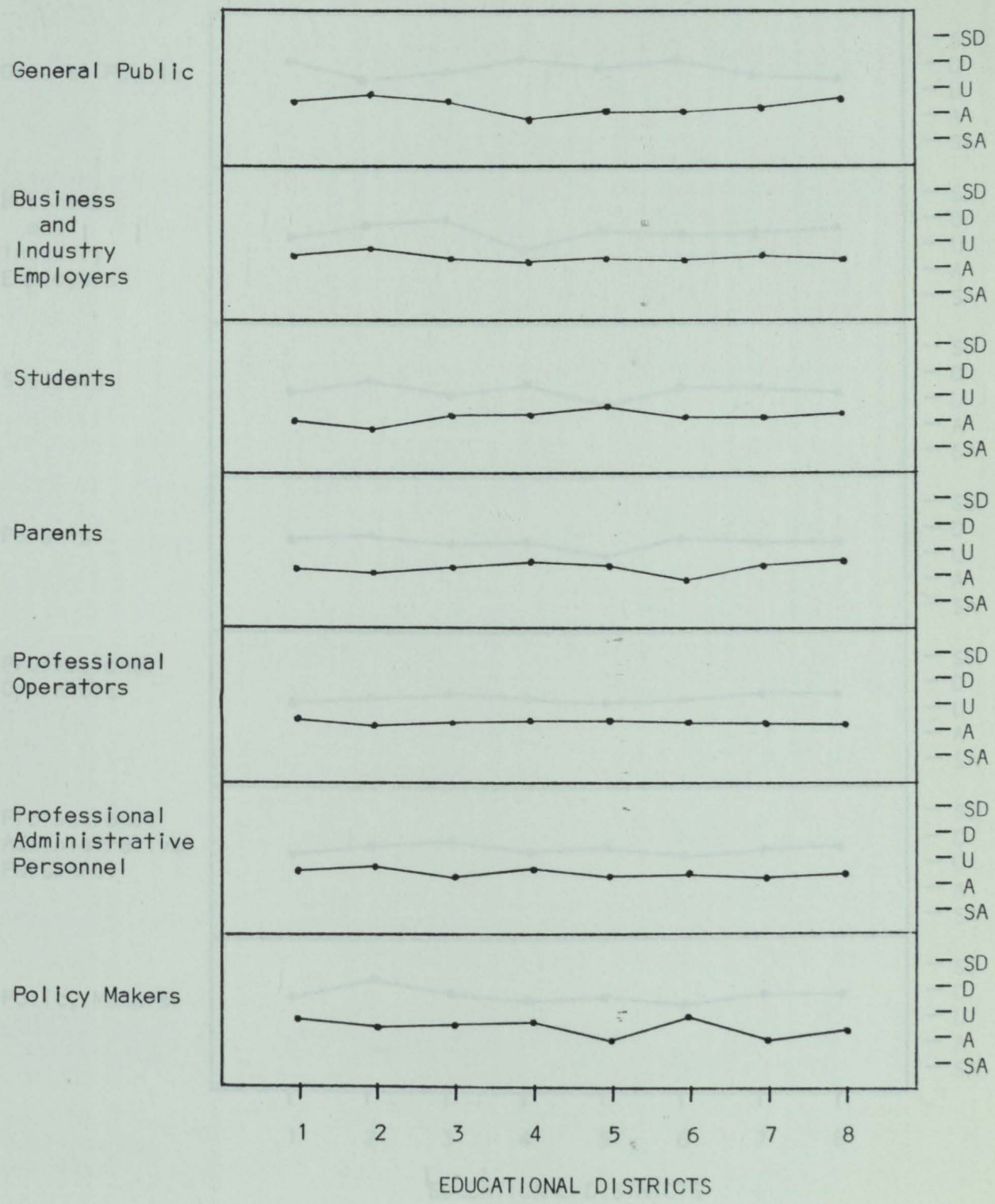
Too much emphasis on agriculture education. Technical institutes are failures as most courses are frivolous and not job oriented. Key to problem is to phase out technical institutes and combine facilities with high schools allowing some students to attend extra year and offer night classes for adults.

APPENDIX H

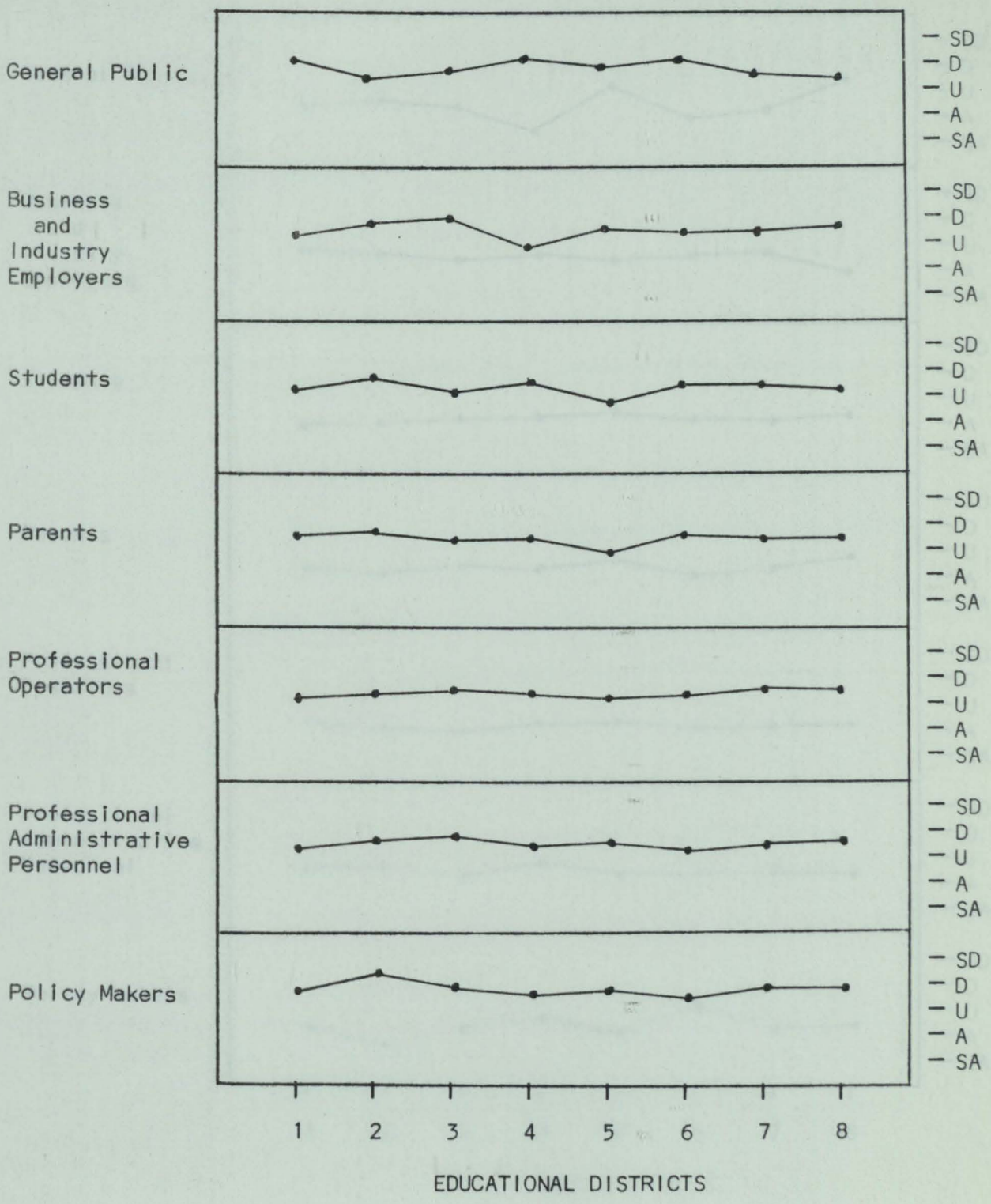
Figures of Responses to Statements

by Groups and by Districts

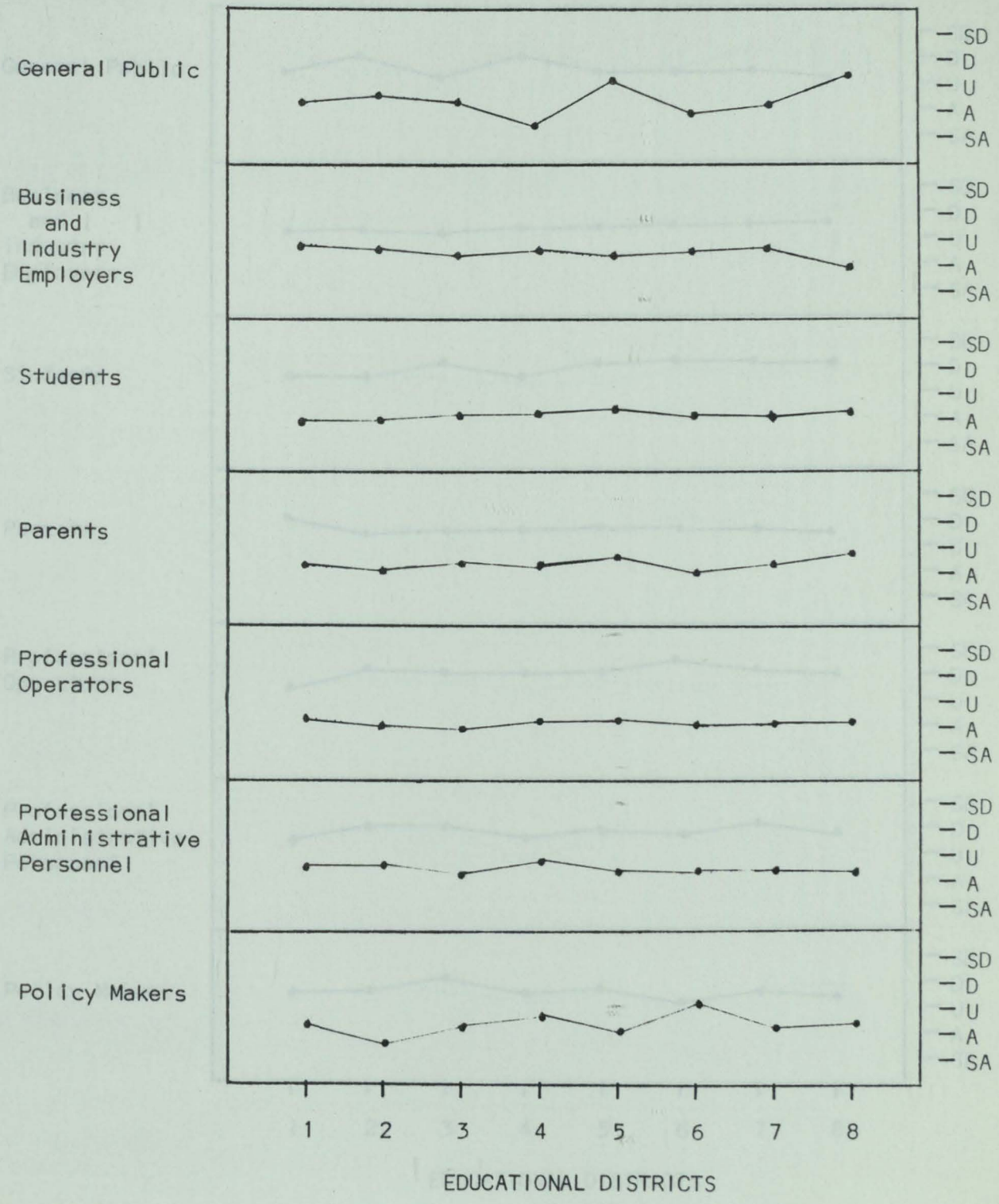
1. Occupational education in high school prepares students for entry-level positions.



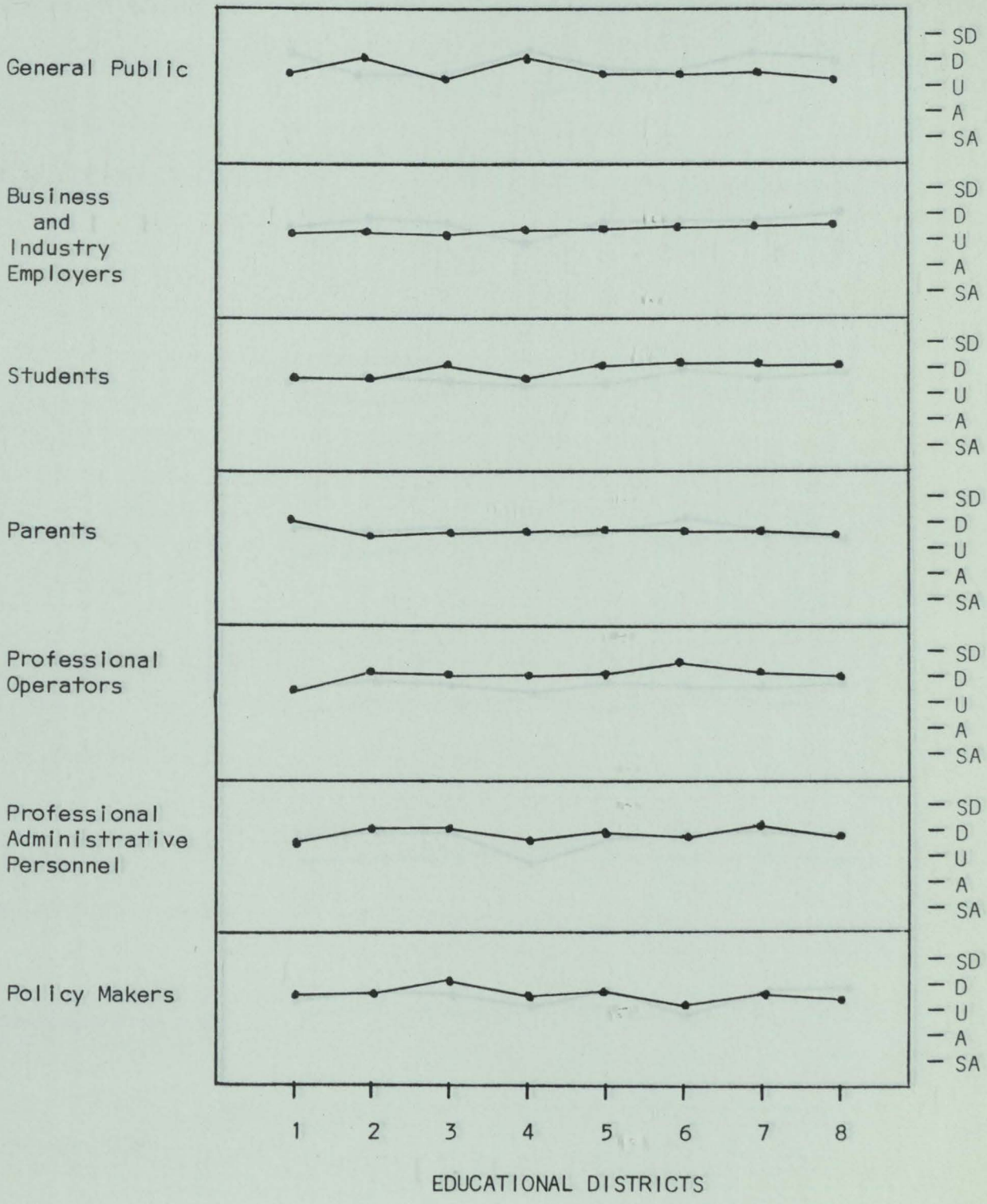
2. Occupational education programs in schools do not attract new industries to an area.



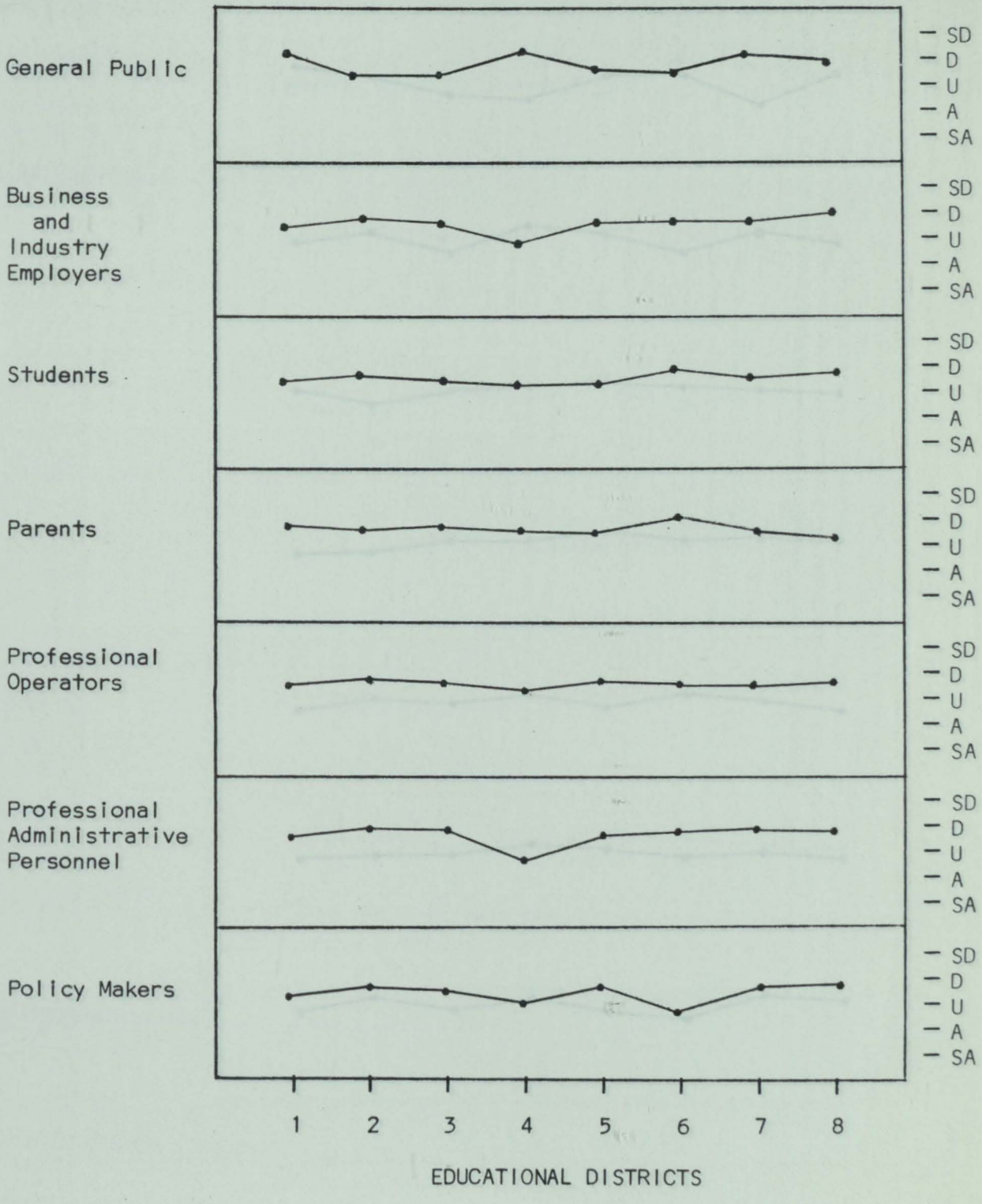
3. Occupational education programs adapt to the changing needs of the local manpower market.



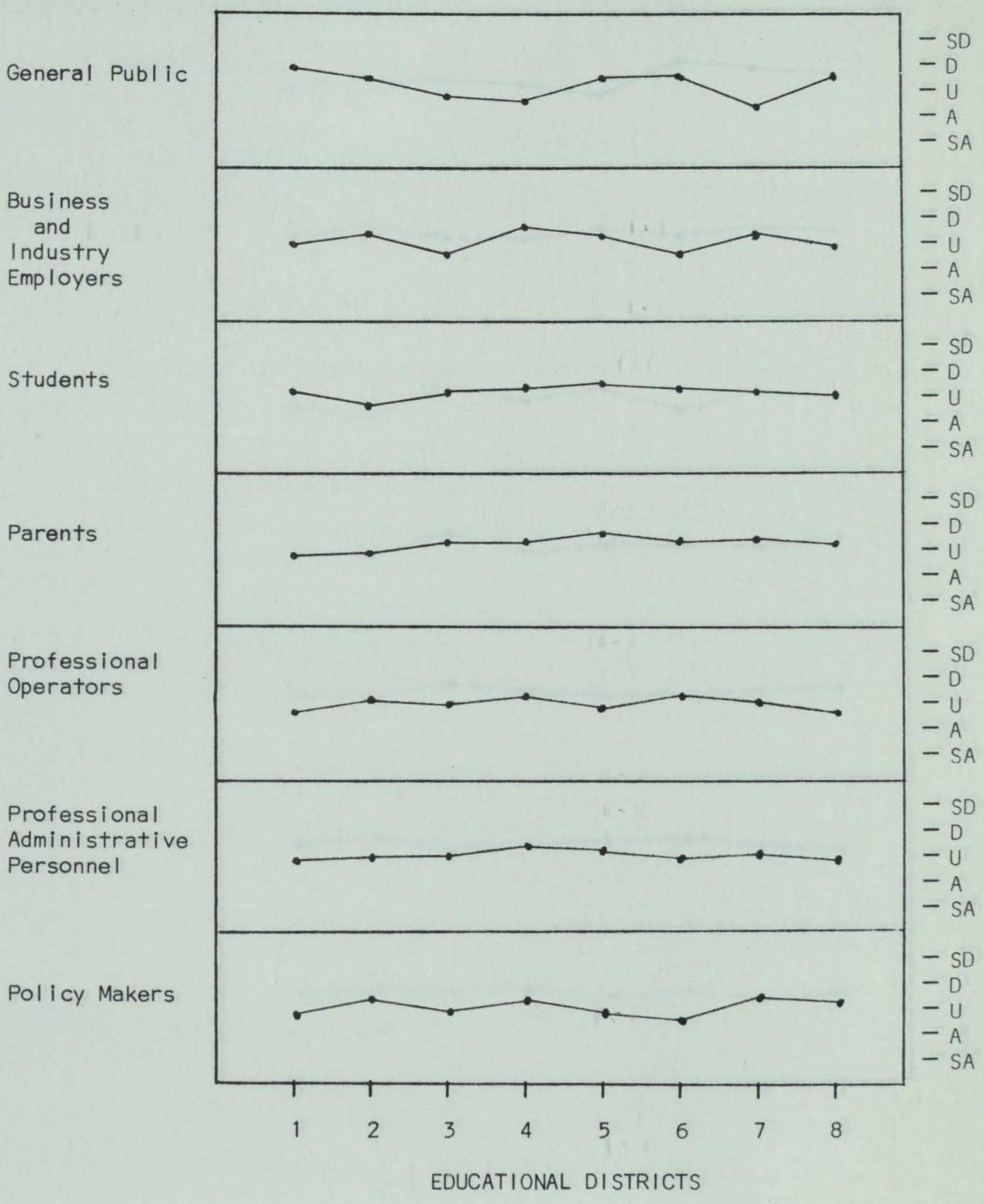
4. Occupational education teachers do not help students find jobs.



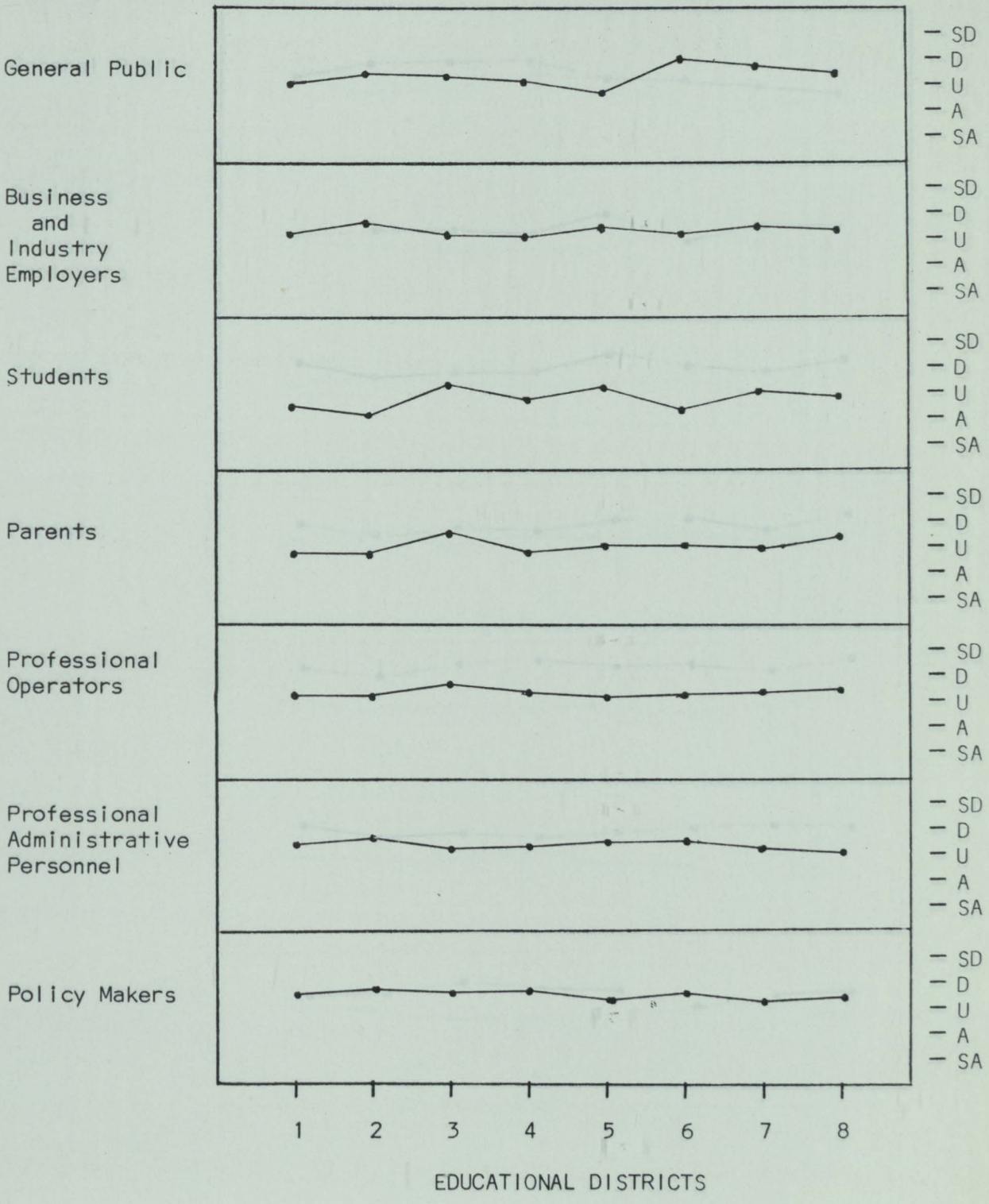
5. Occupational education programs do not provide job opportunities for handicapped individuals.



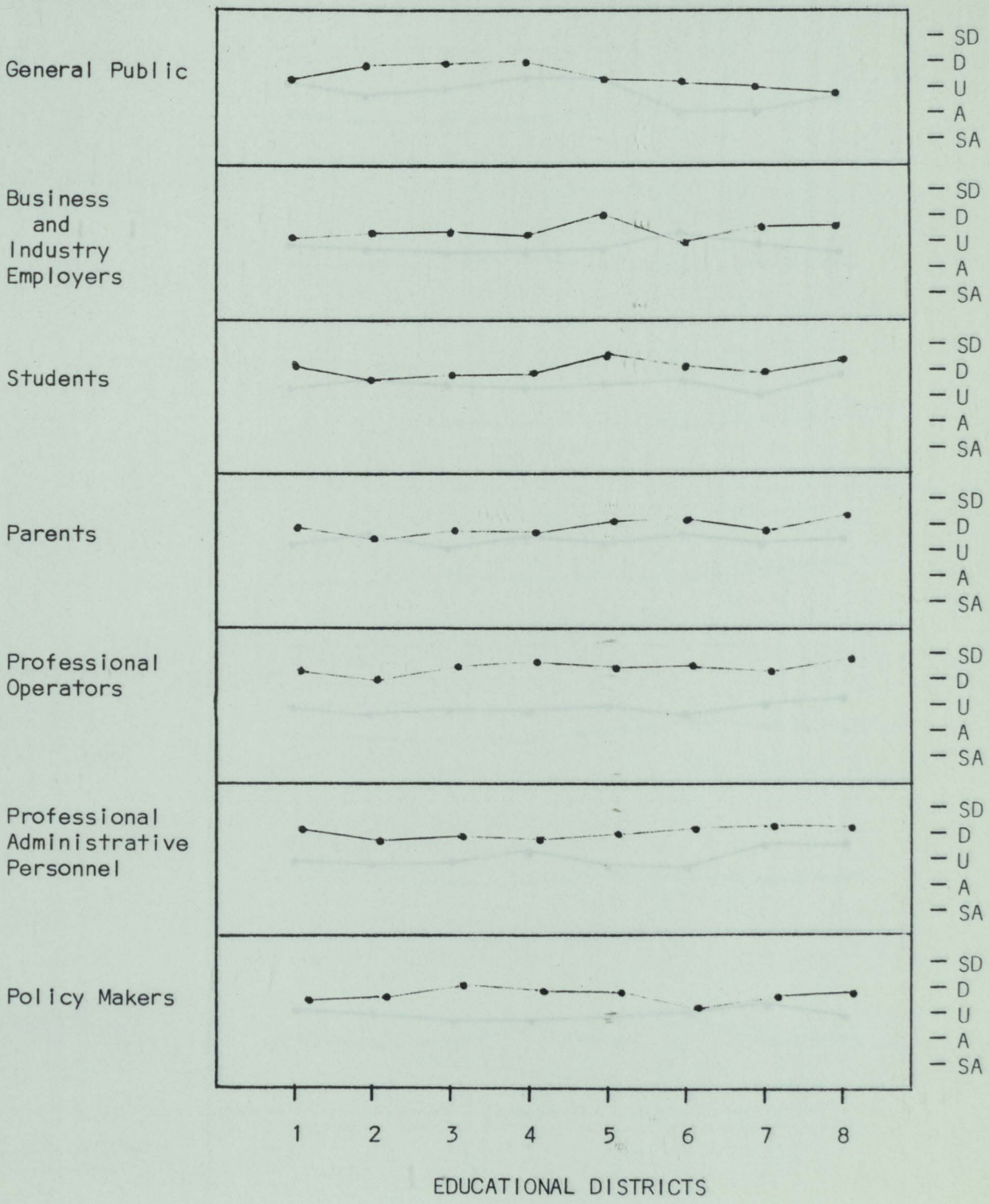
6. Occupation awareness activities are provided for students in the elementary grades.



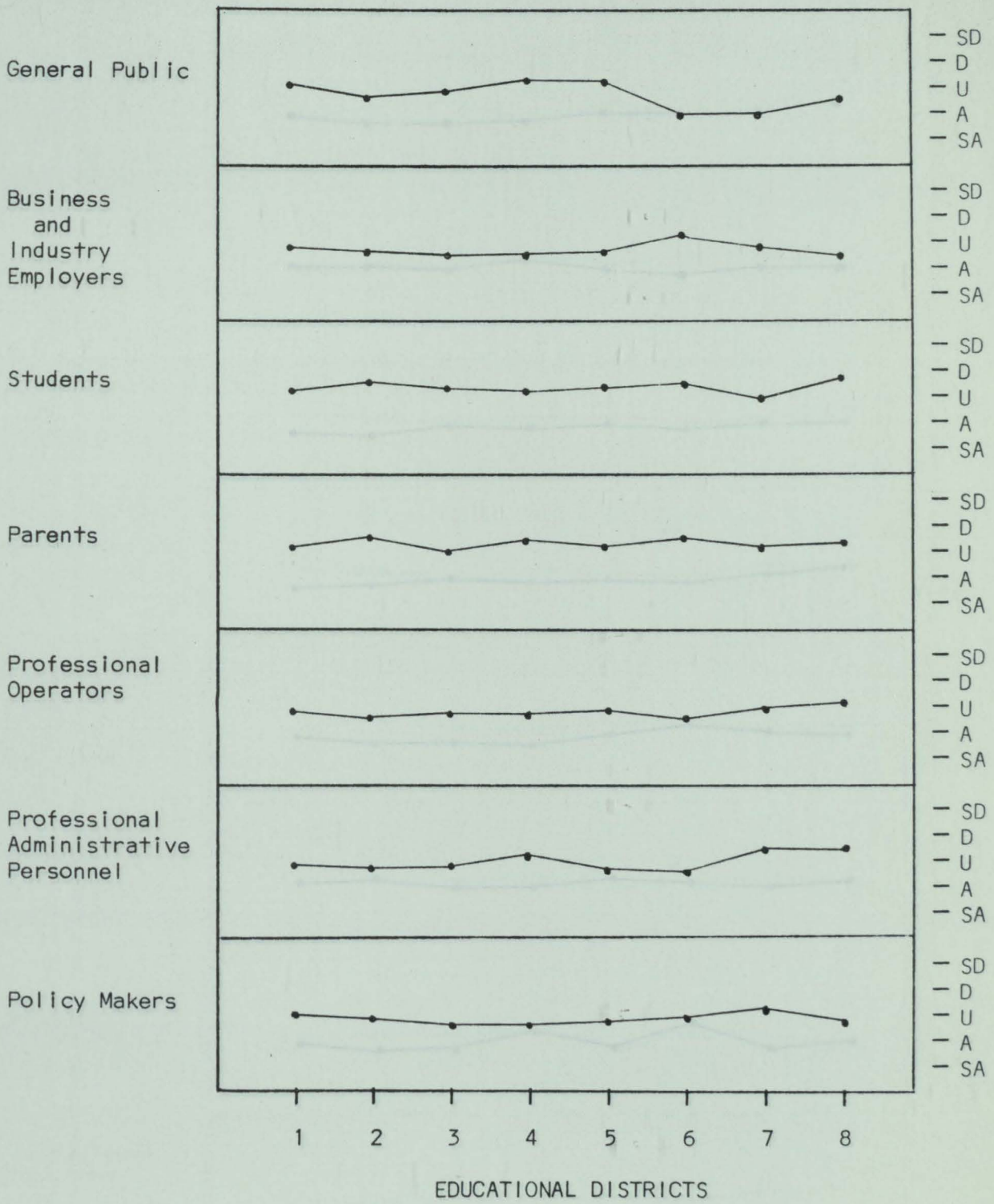
7. Occupational education programs prepare students to enter college.



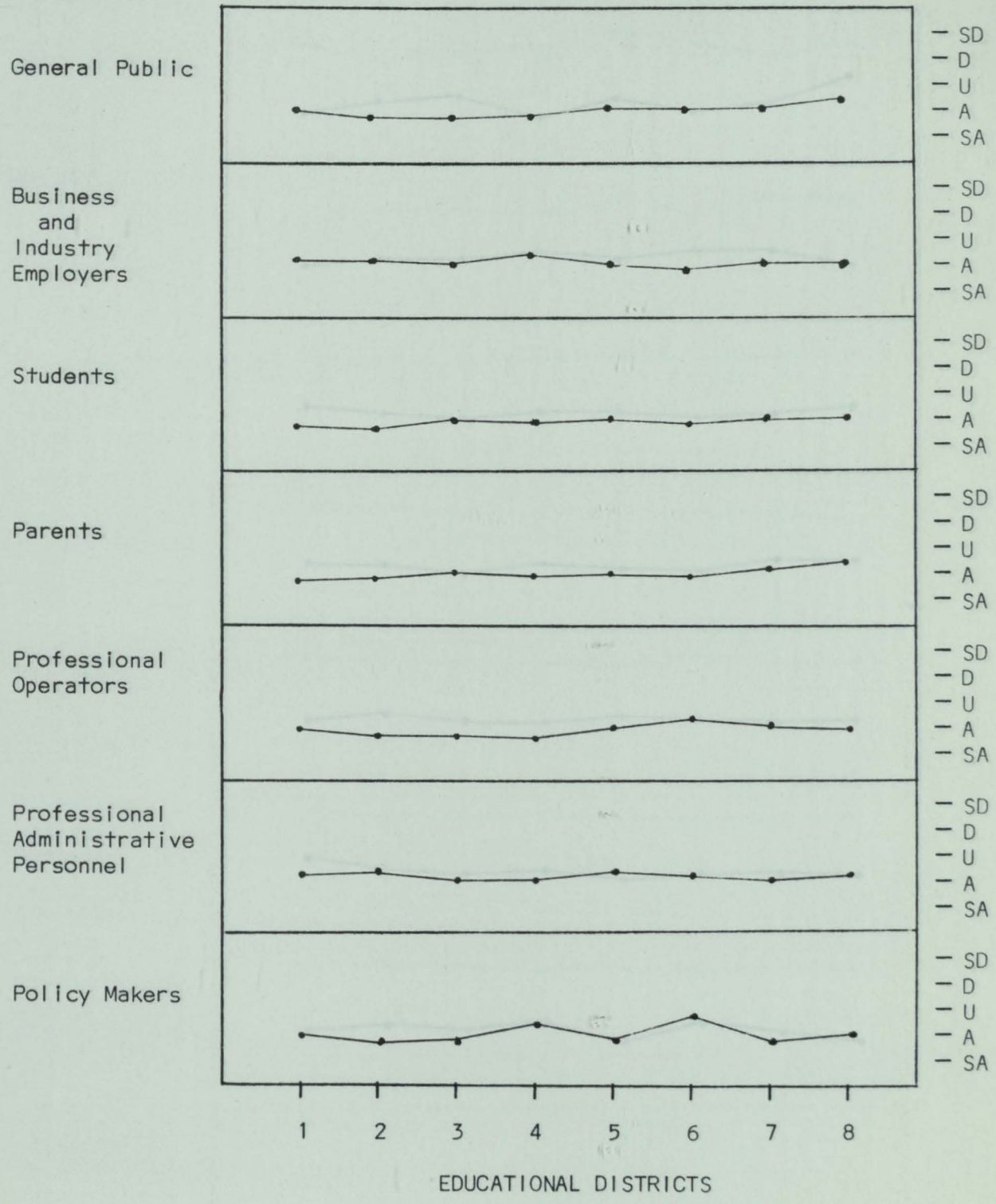
8. Occupational education teachers require less education than do teachers of academic courses.



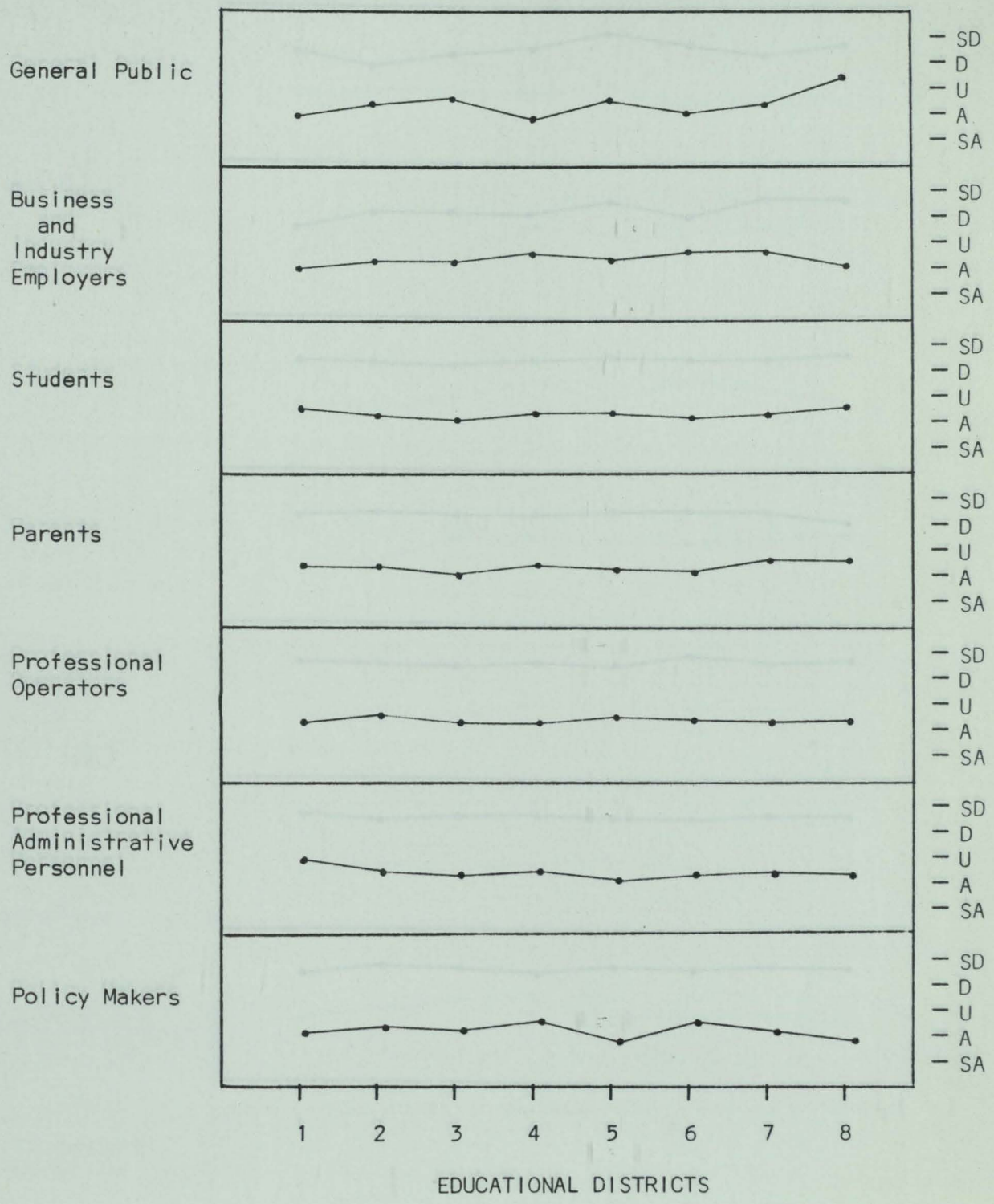
9. Scholastically able students are discouraged from entering occupational education programs.



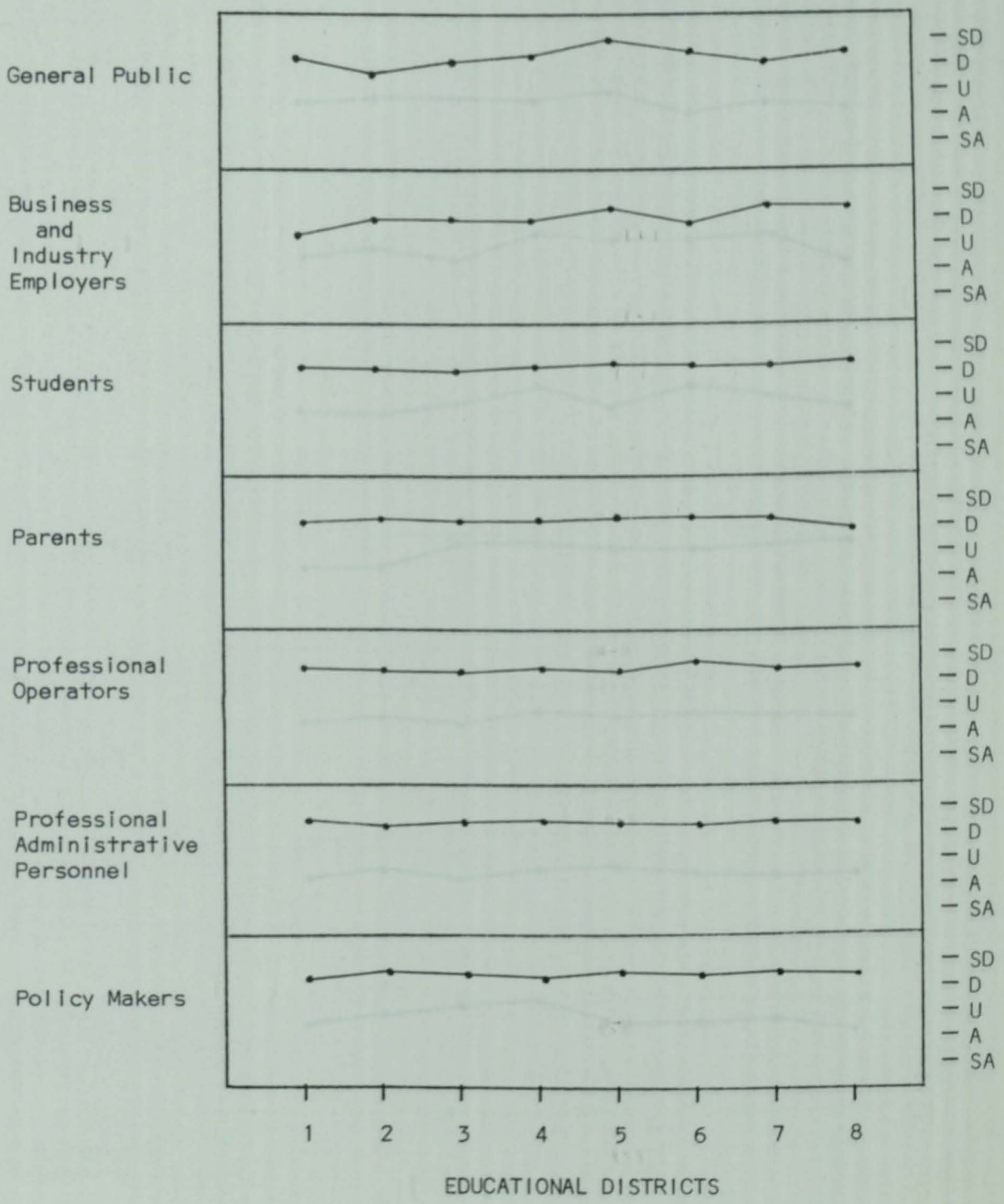
10. Occupational education training develops within students a sense of dignity and pride in their jobs.



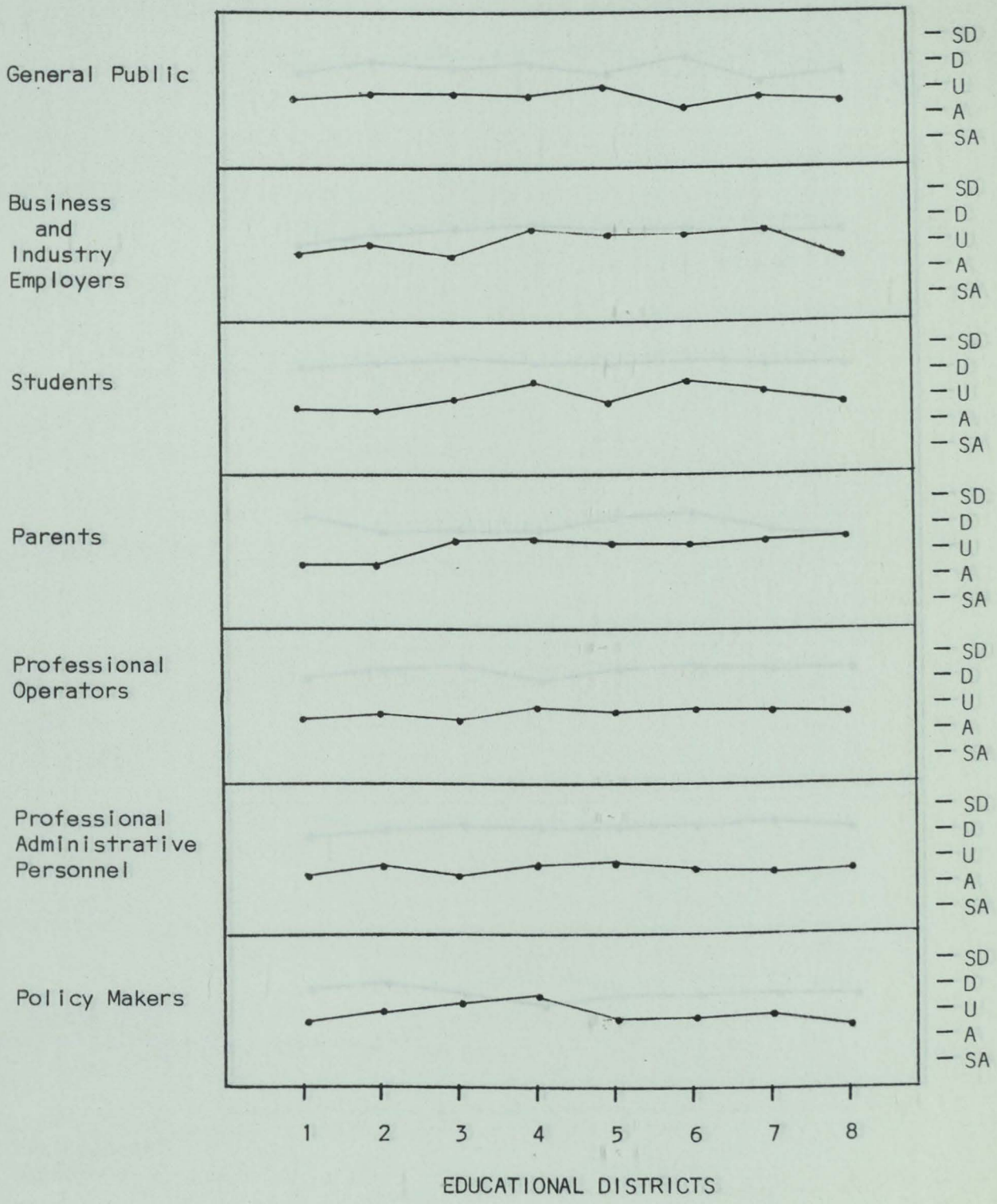
11. Industry cooperates in the planning of occupational education programs.



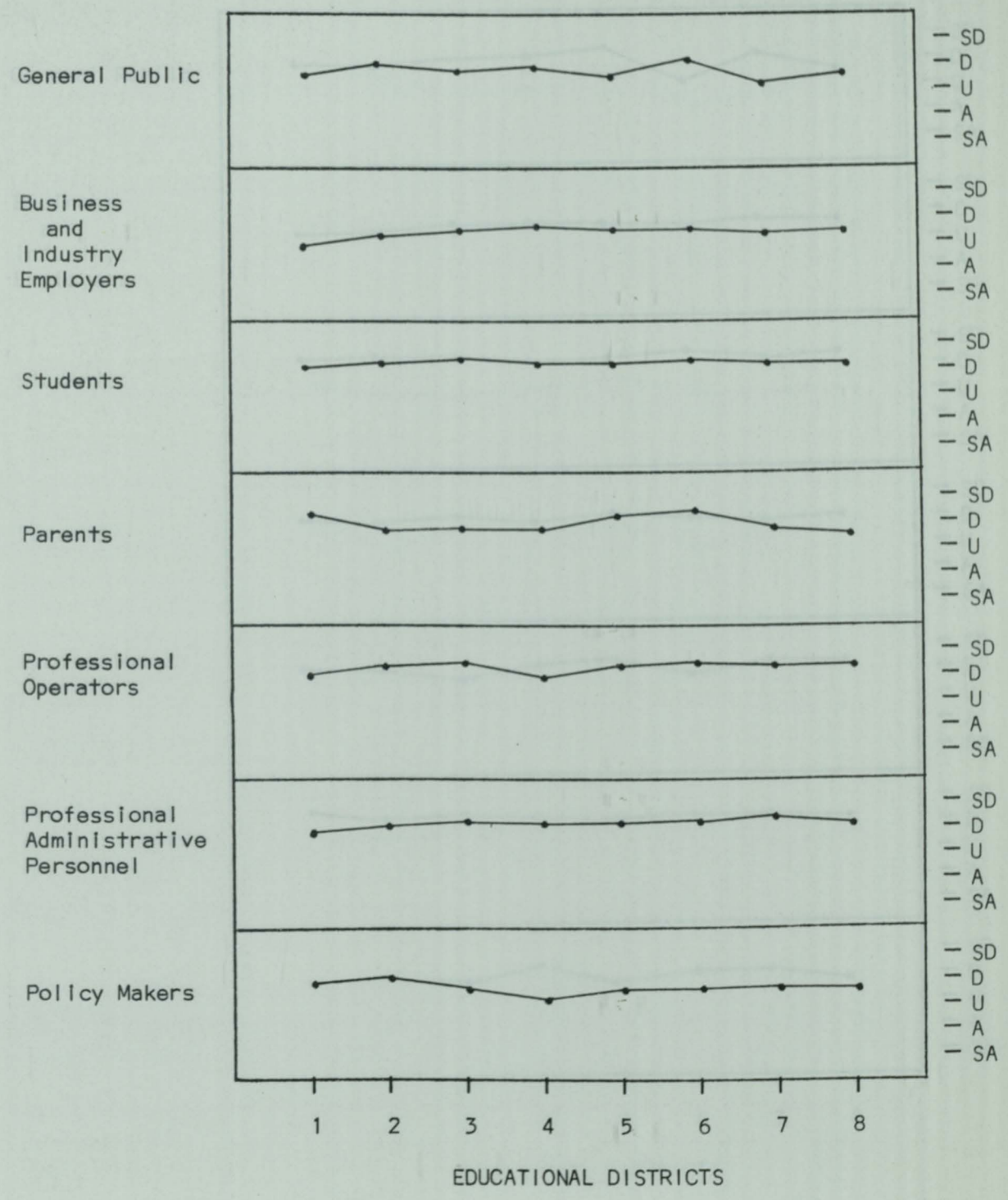
12. Occupational education programs are too costly in terms of money, time, and effort.



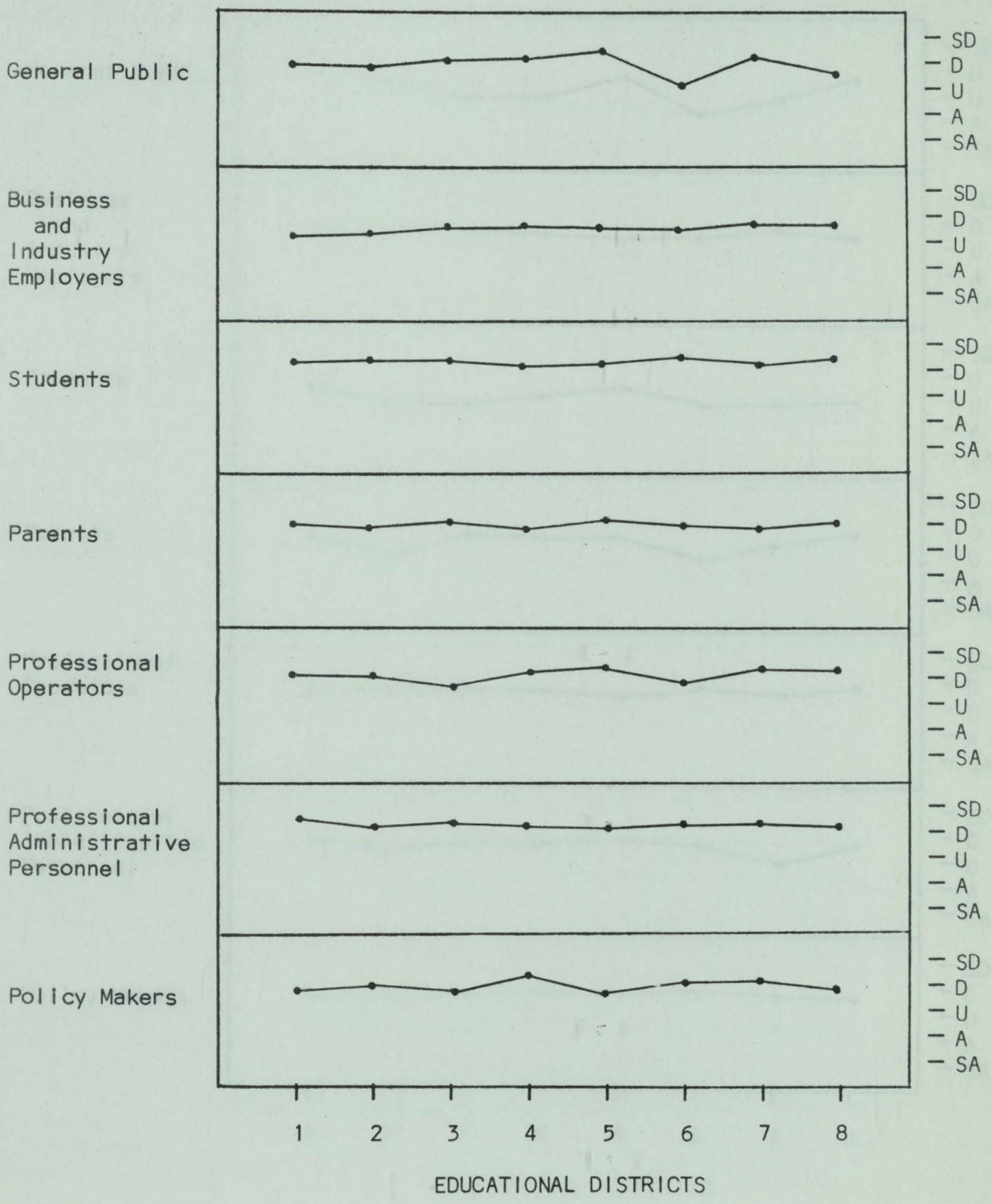
13. Junior high school programs focus on occupational orientation.



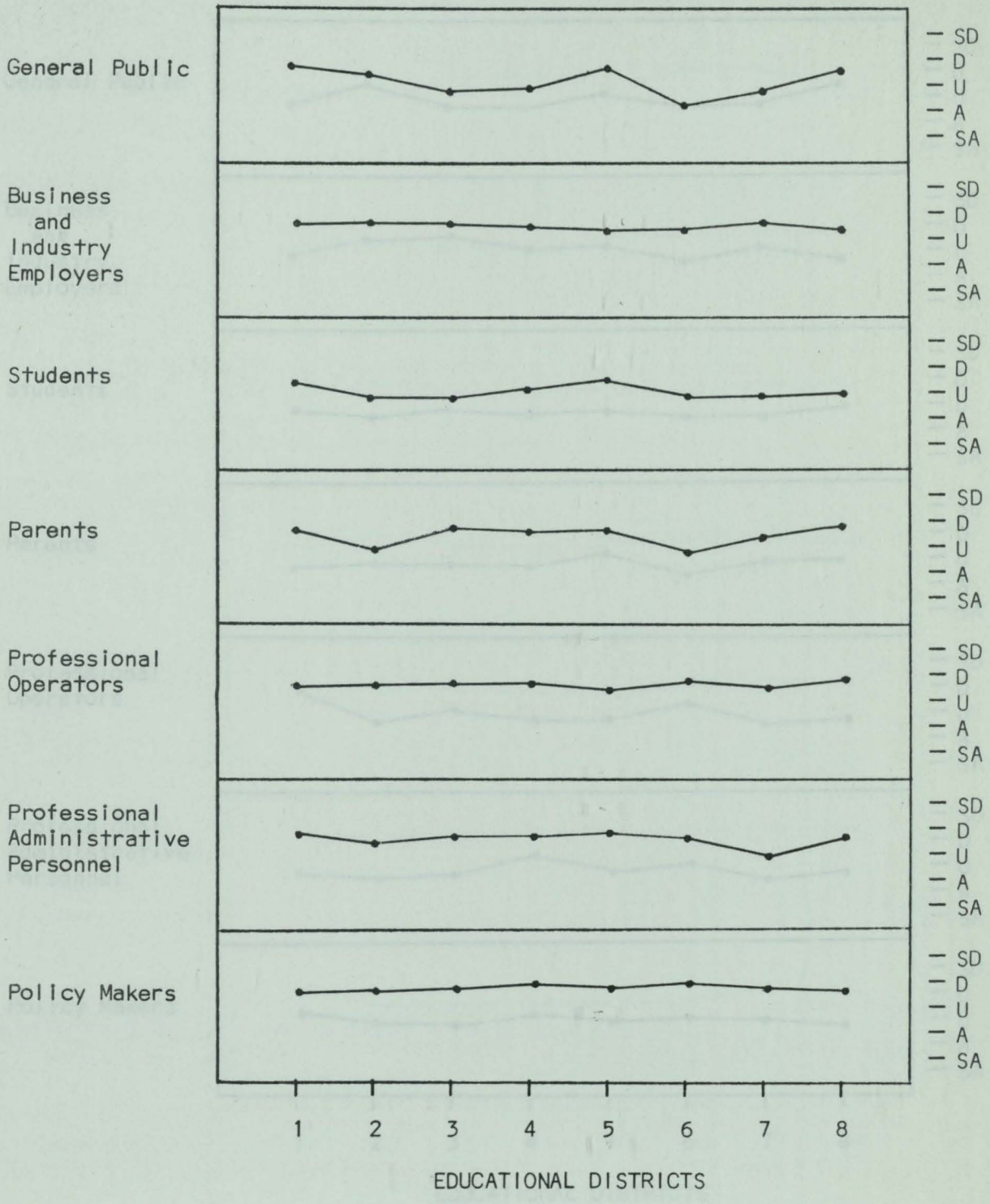
14. Occupational education programs do not emphasize attitudes and work habits which are necessary for successful employment.



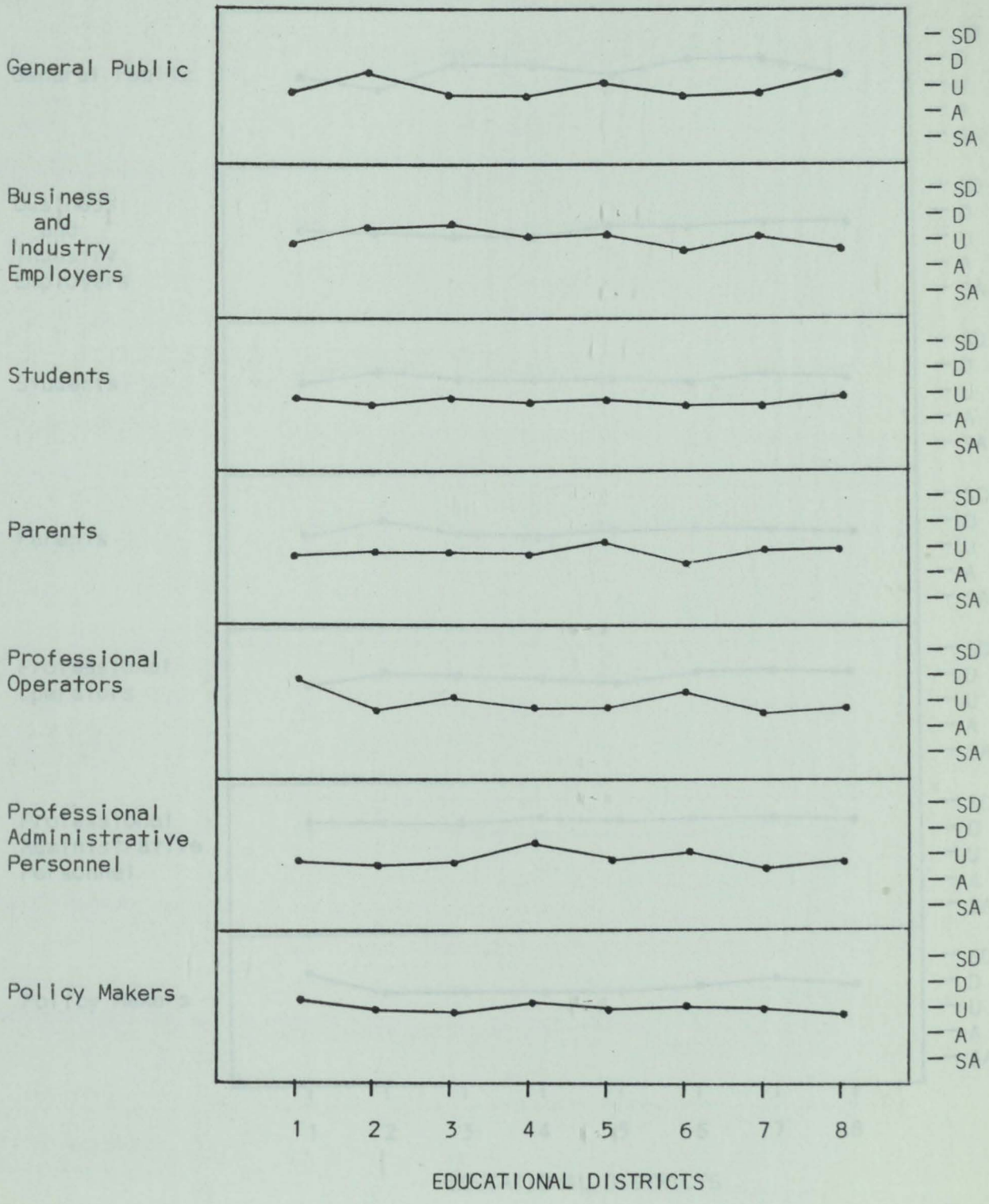
15. Occupational education programs are primarily for students from low income families.



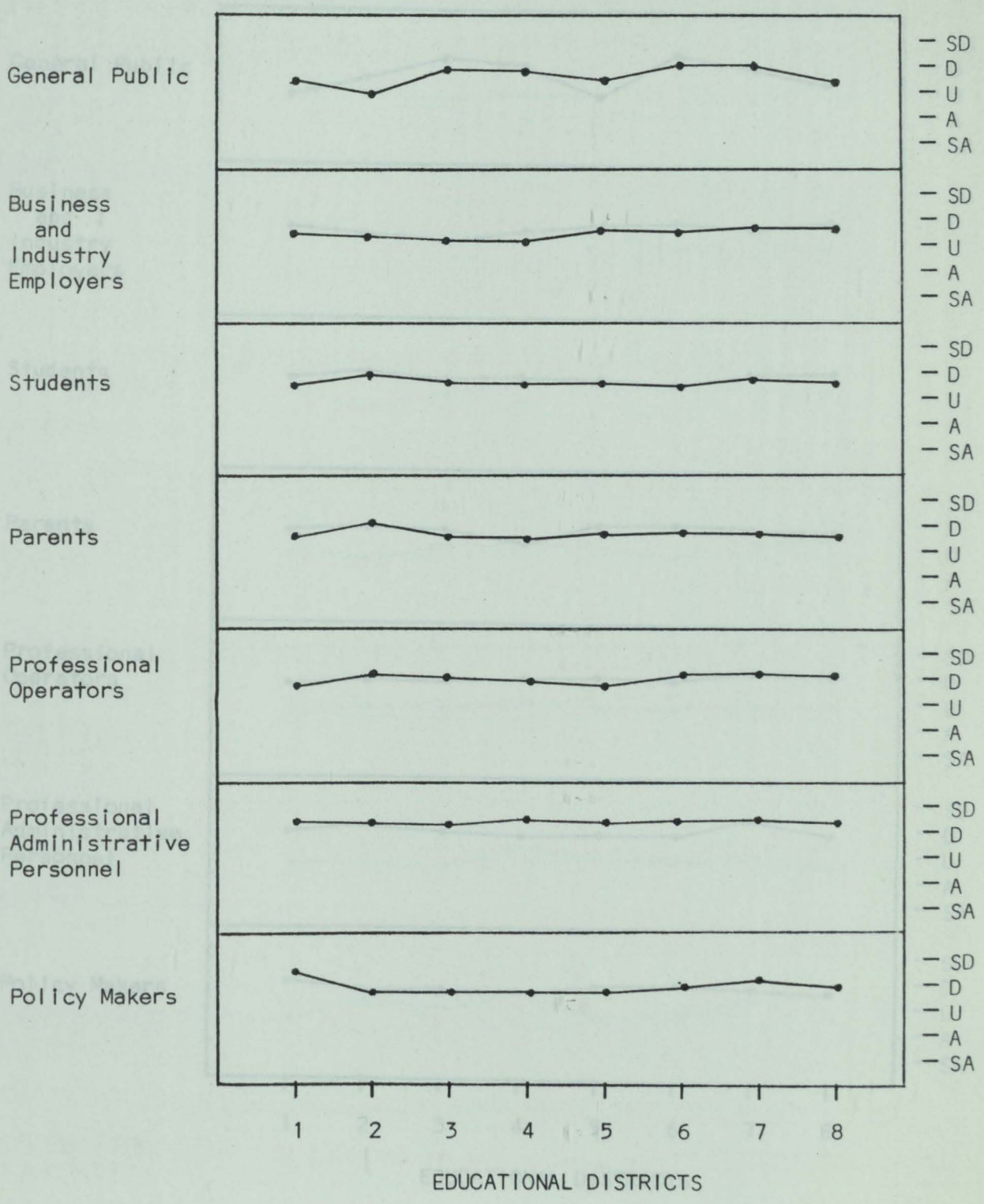
16. The occupational education programs in my county are varied enough to serve the needs of all students.



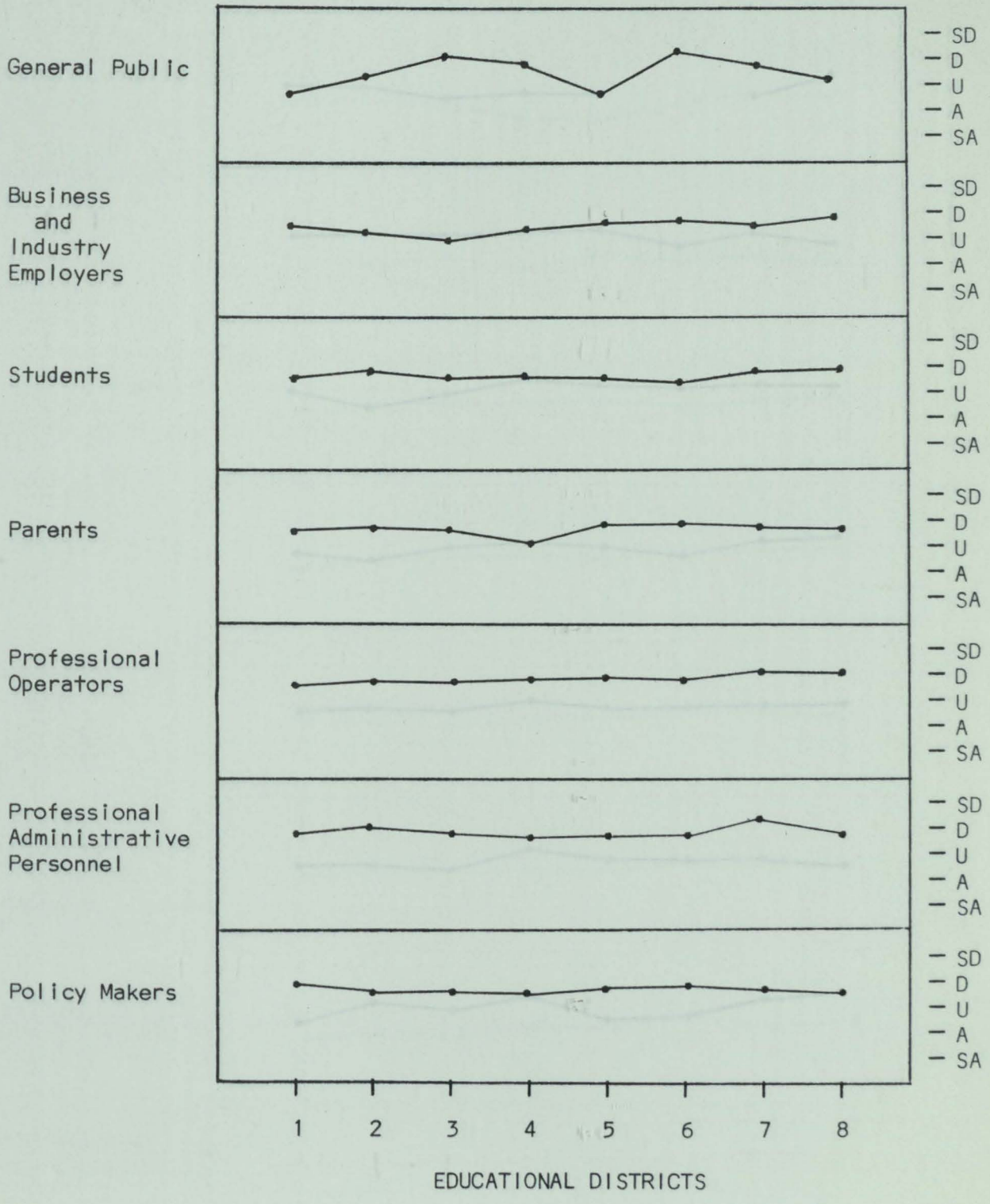
17. Occupational education at the high school level provides training in a broad cluster (wide variety) of occupational areas.



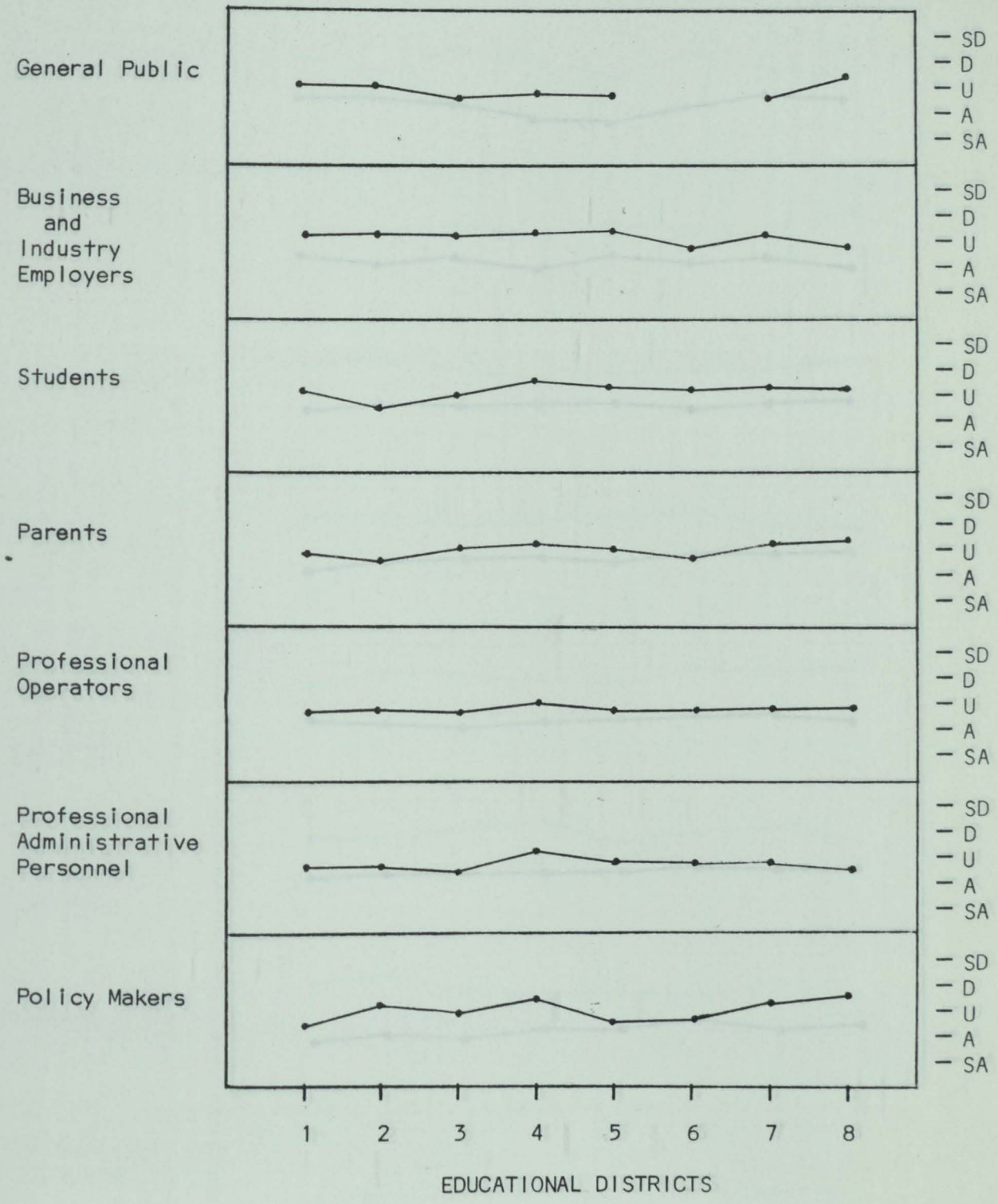
18. School administrators do not support occupational education programs.



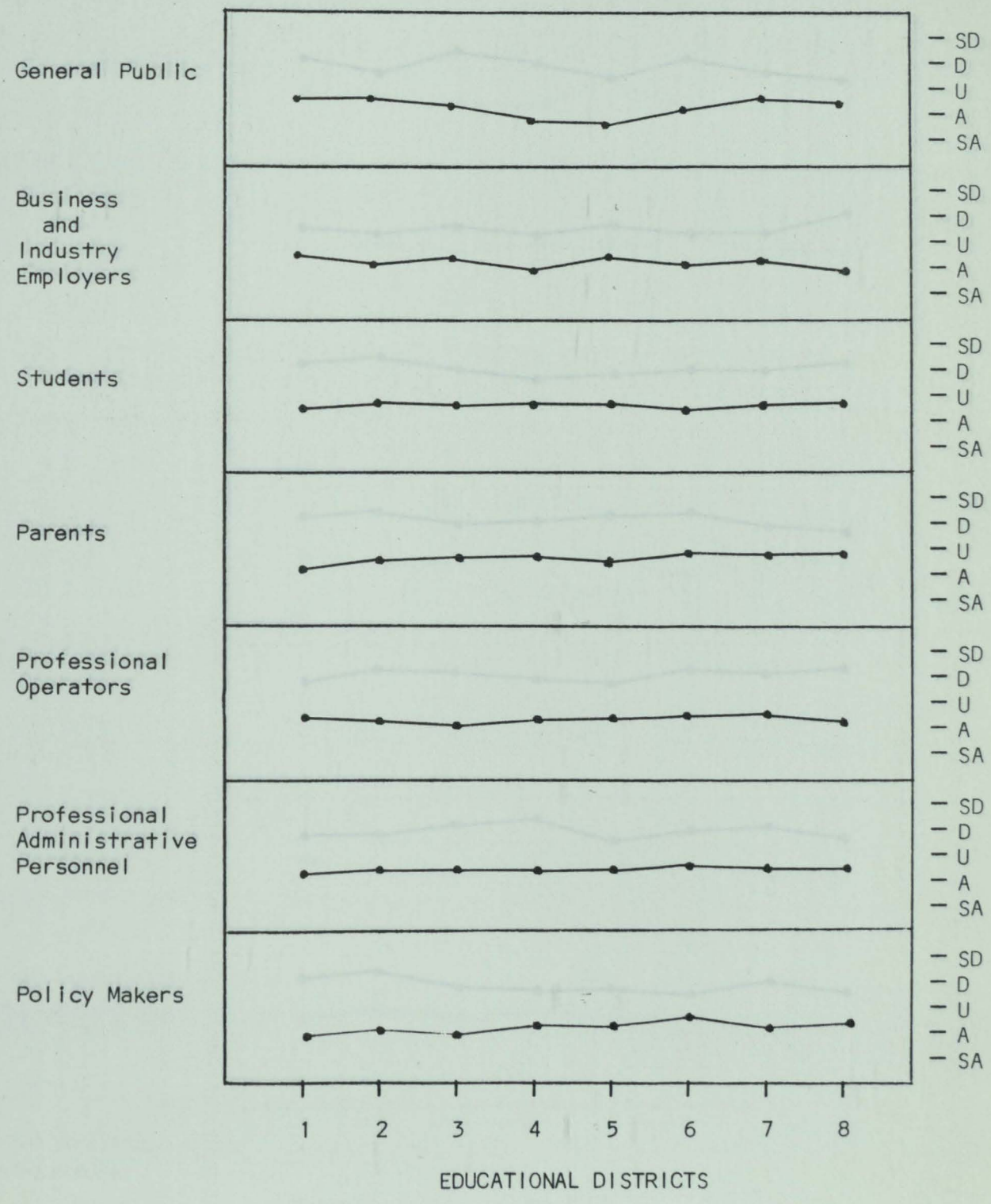
19. Most high school students are being trained for irrelevant occupations.



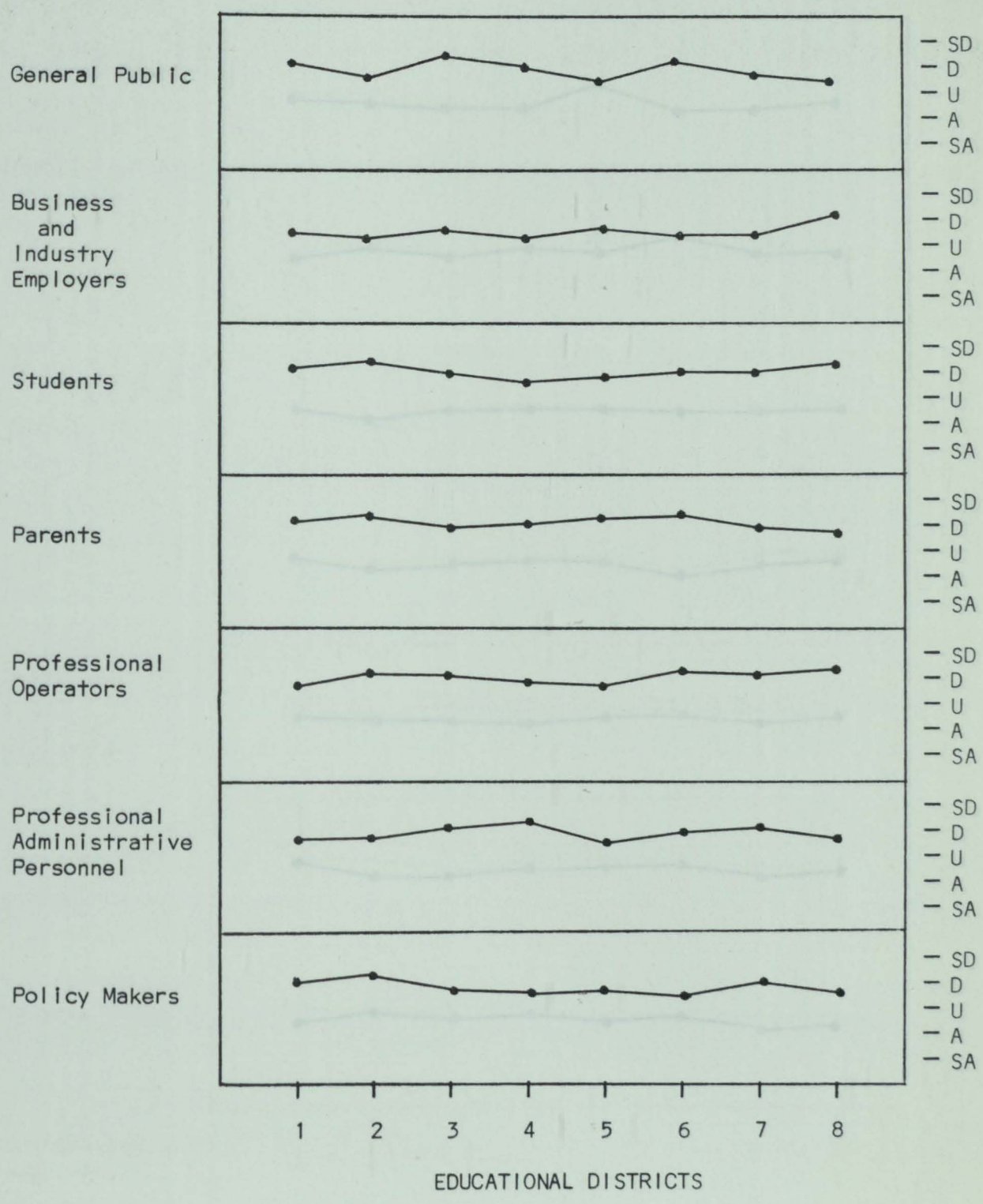
20. Career exploration activities are provided for students in grades 7-9.



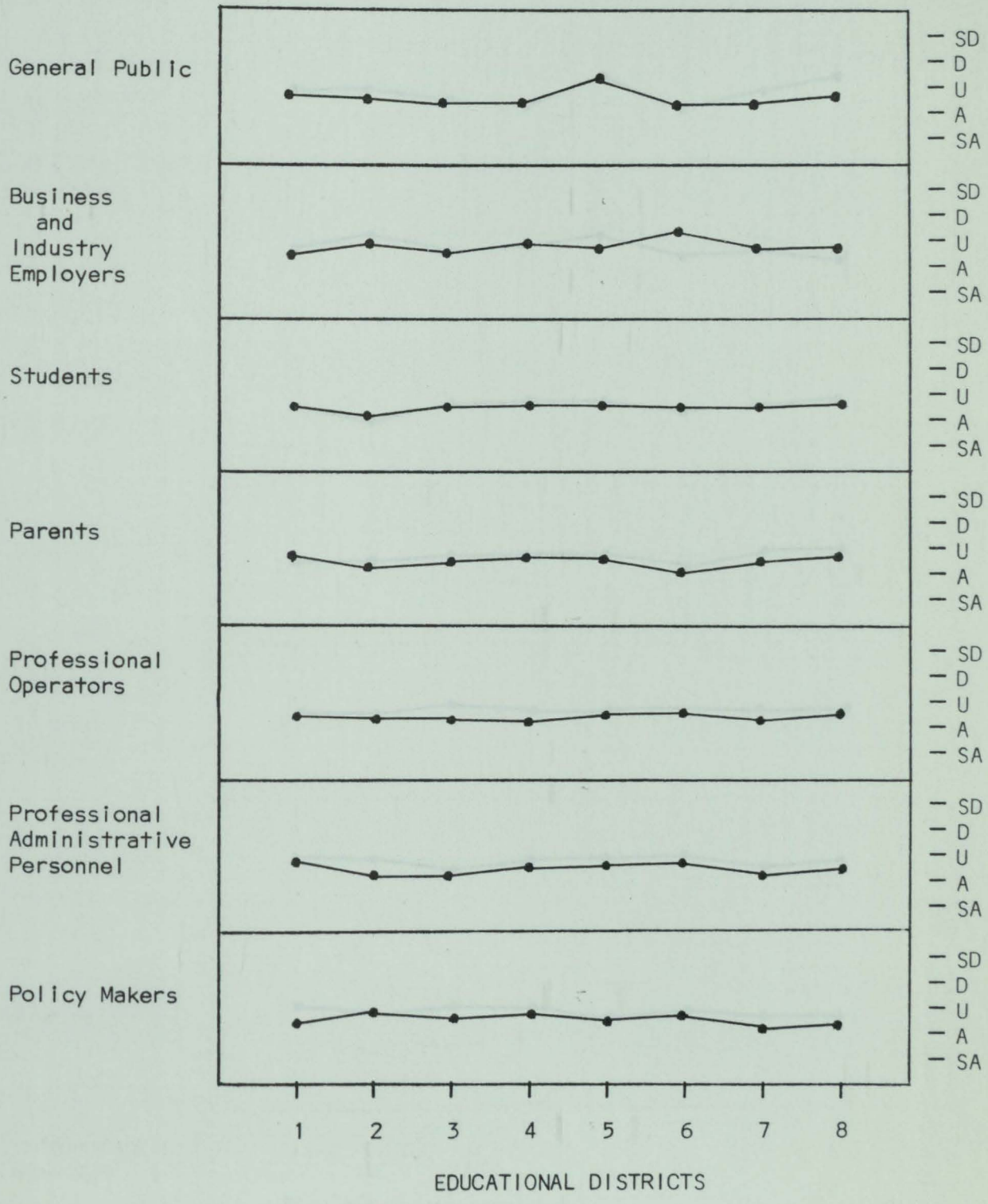
21. Some social ills--underemployment and rising crime rate among youth--indicate a lack of occupational education programs for those who need them most.



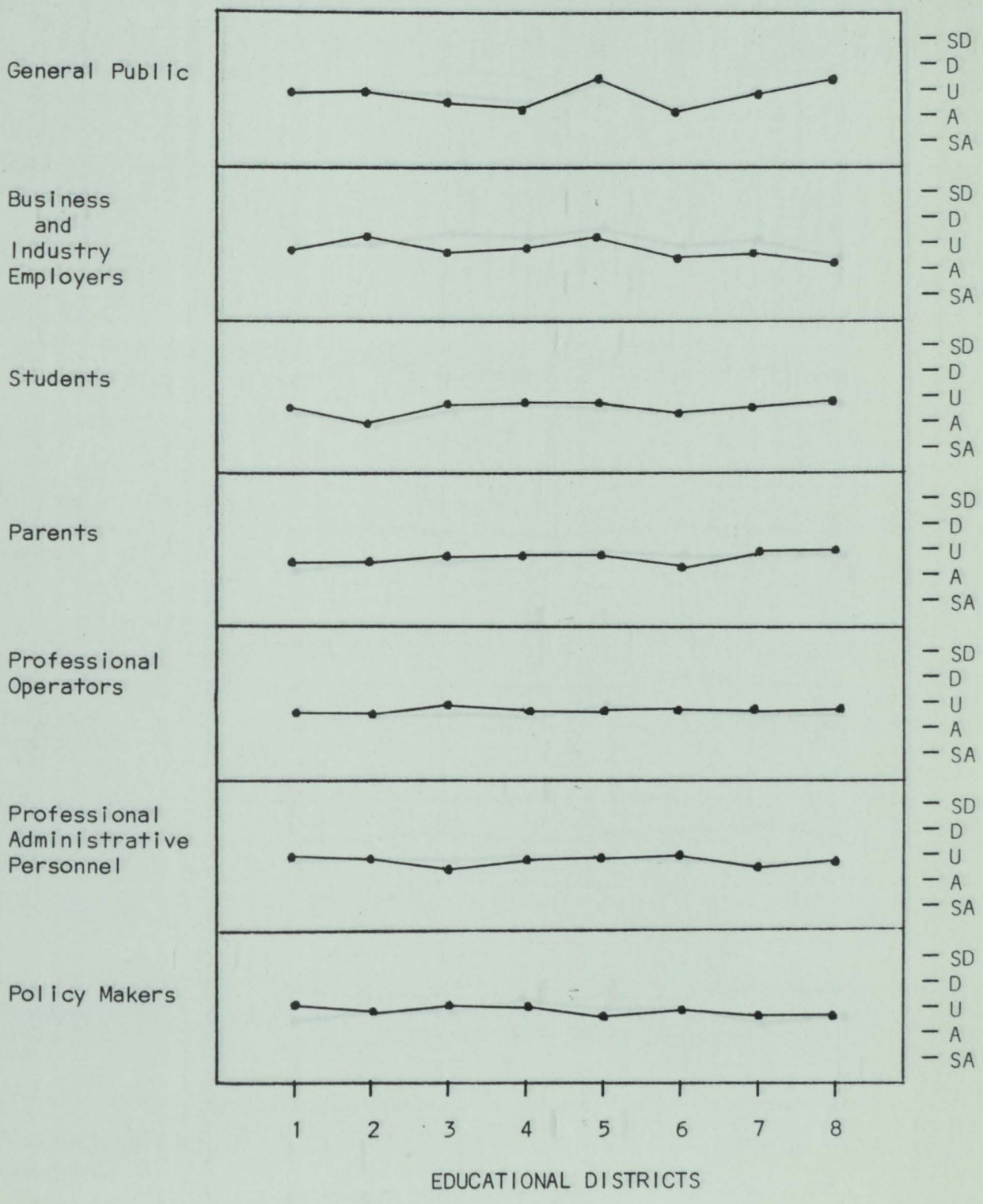
22. Occupational education fails to make students aware of their own potential.



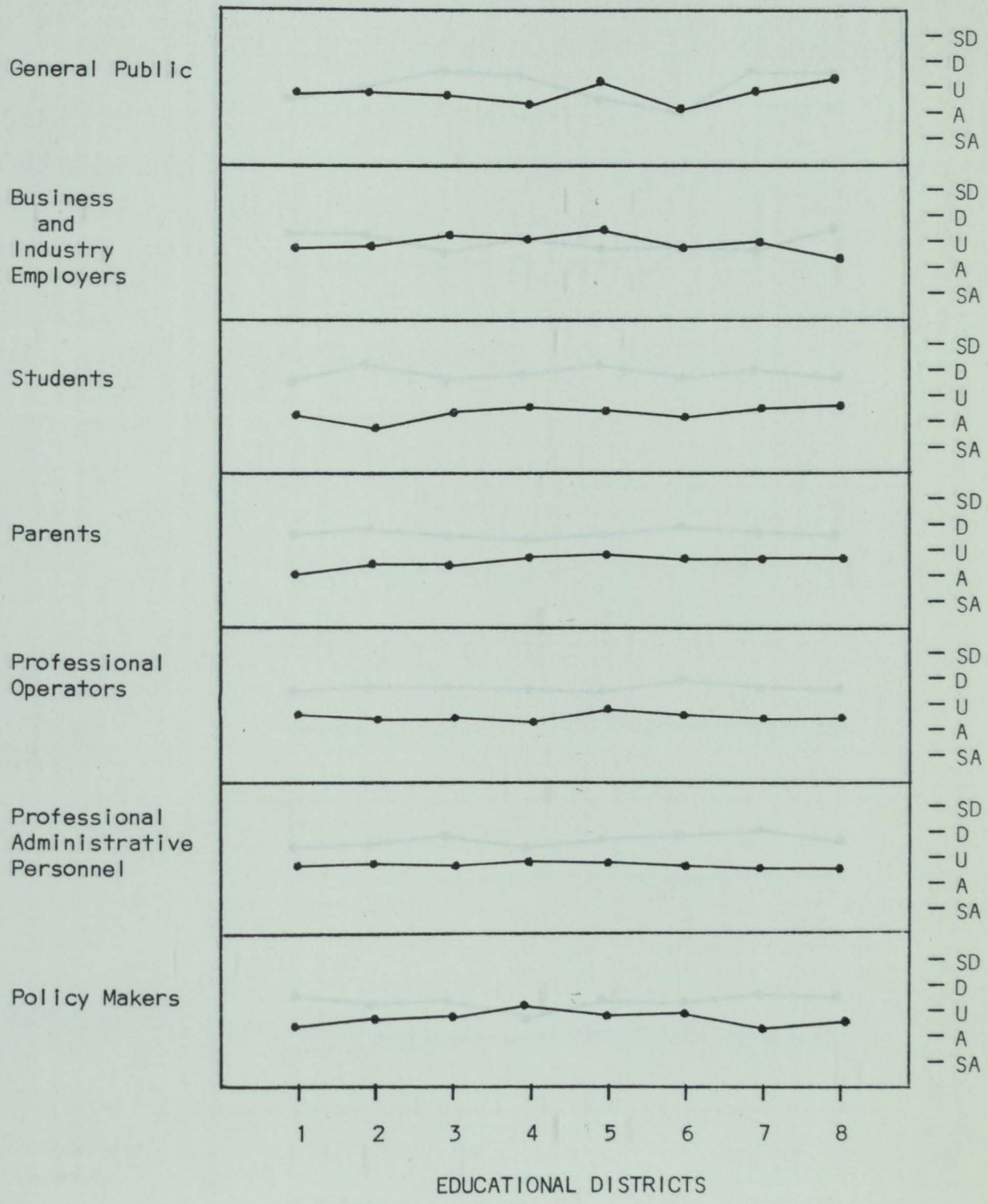
23. At the high school level, occupational education provides training for specific skills.



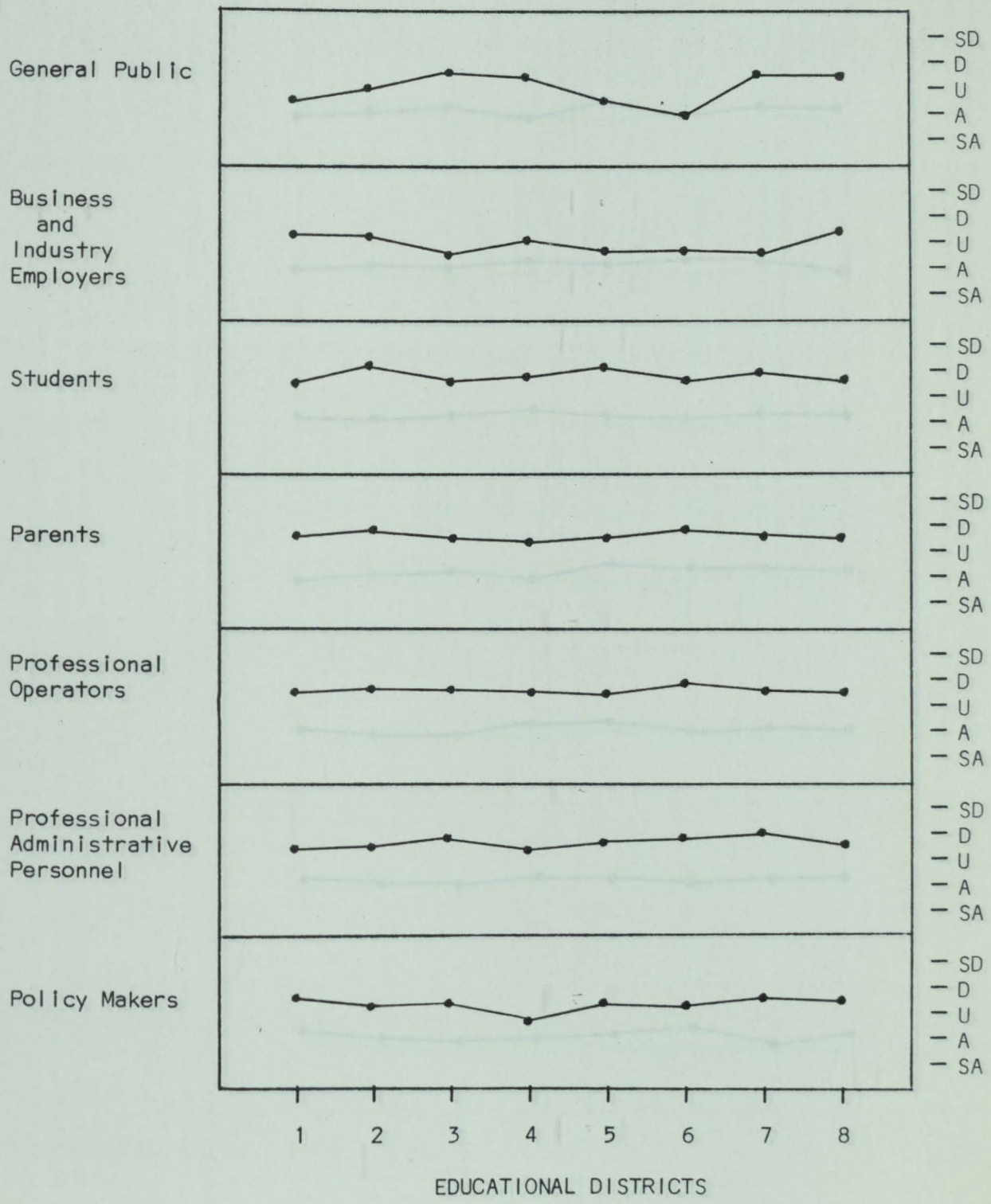
24. Occupational education programs in high school prepare students for a wide range of job opportunities.



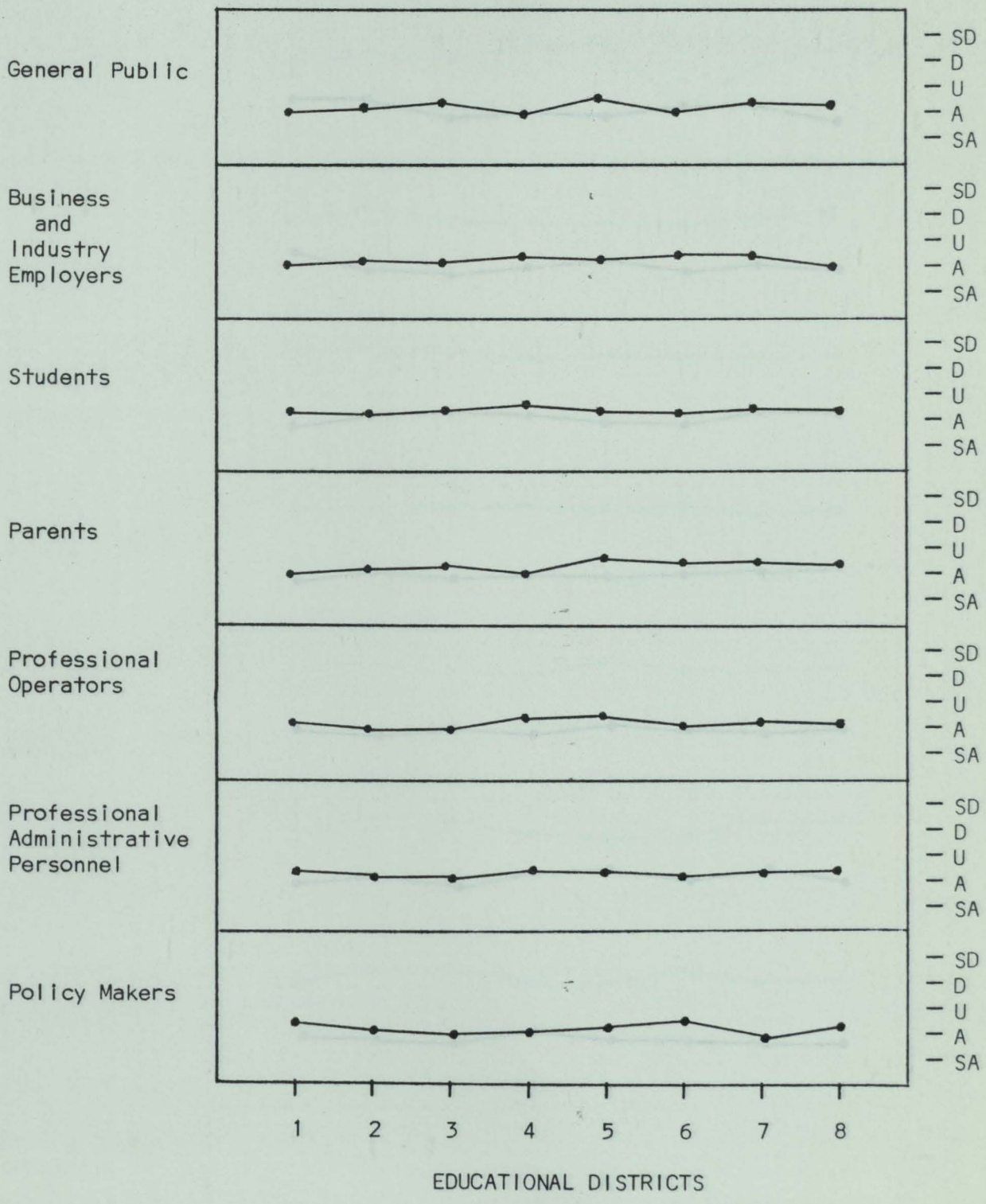
25. Occupational education programs take into account future needs of society.



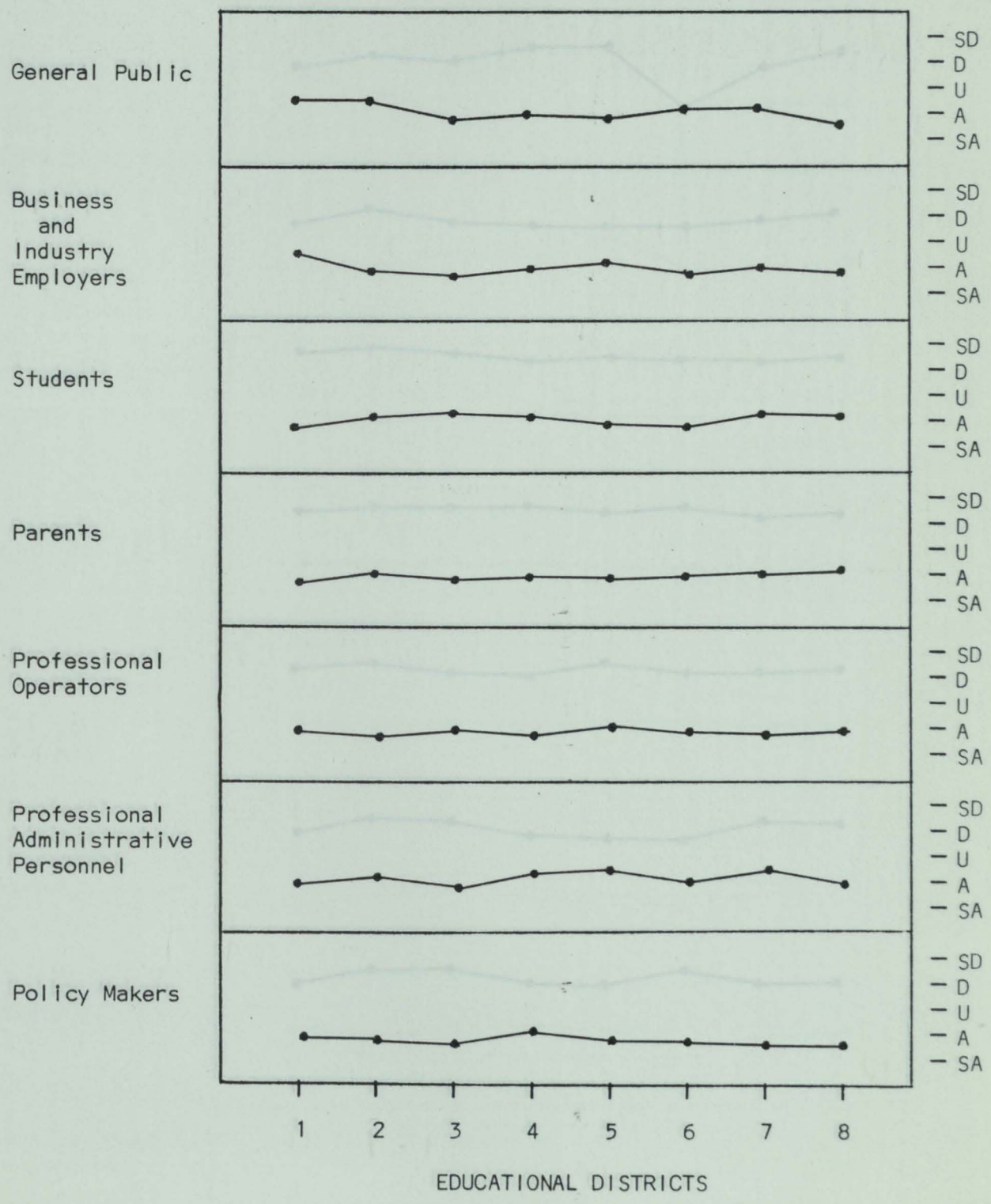
26. Preparing students for careers receives little attention at the high school level.



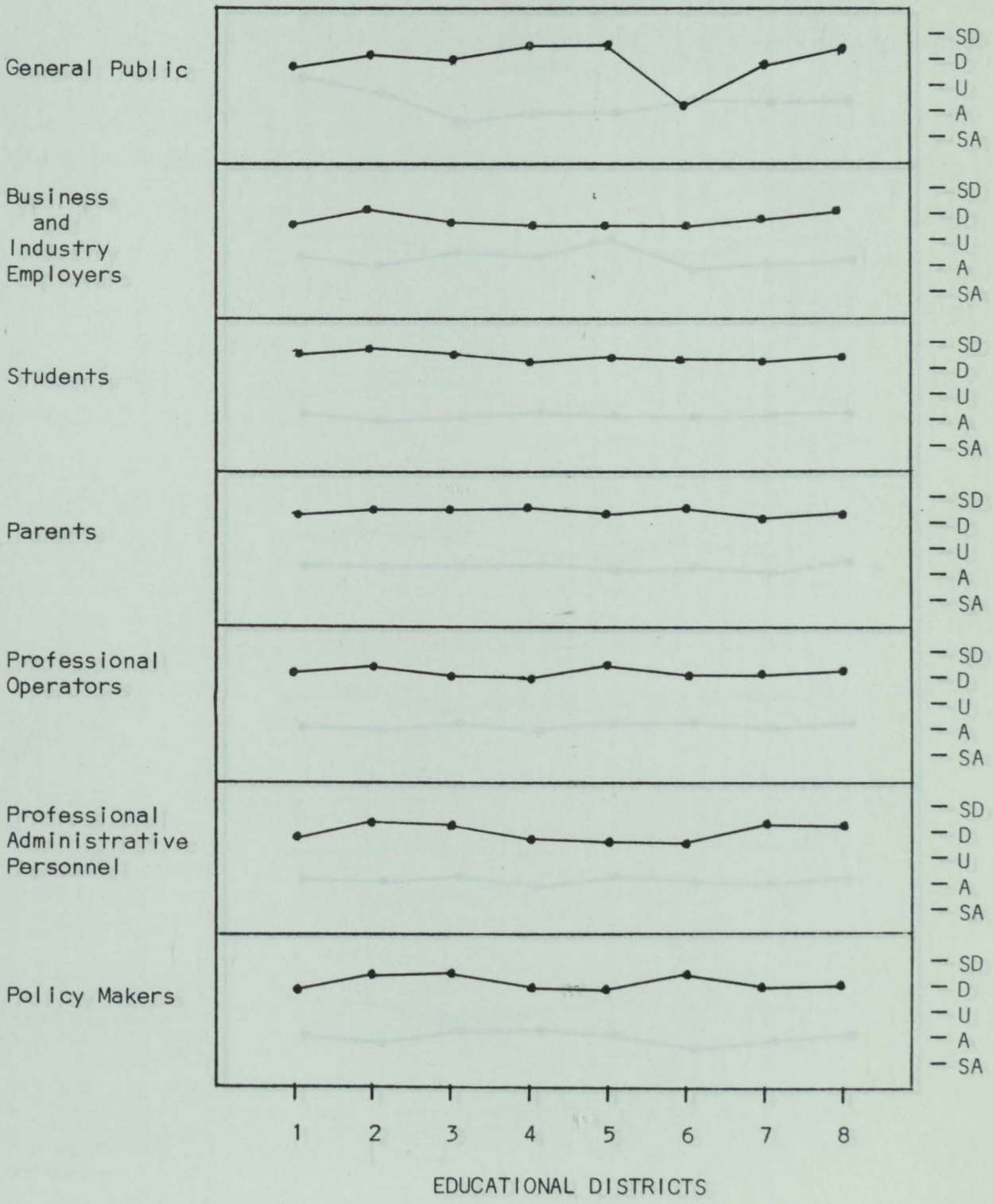
27. Occupational education programs provide opportunities for the disadvantaged.



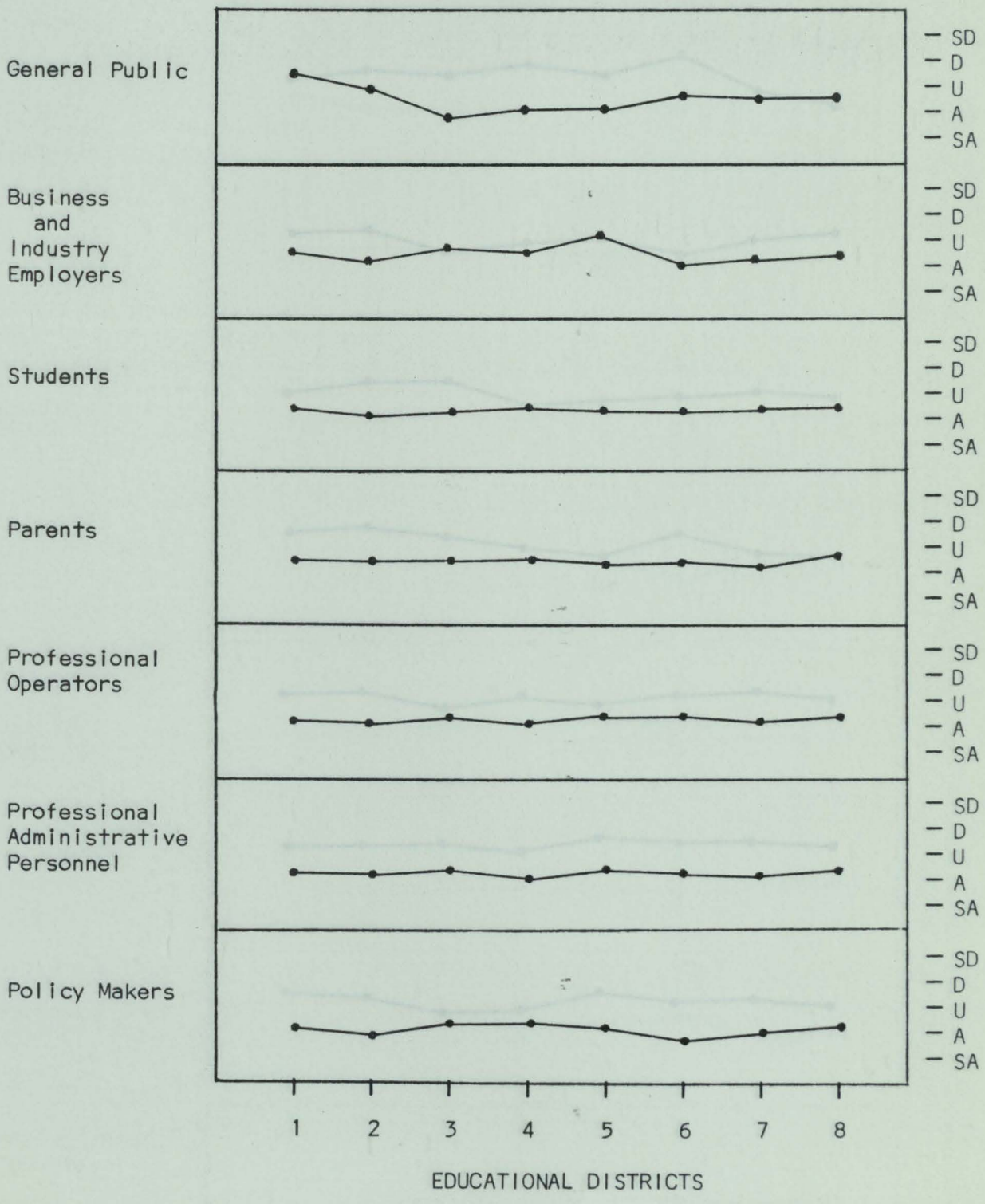
28. Not enough information is available to the public about occupational education programs.



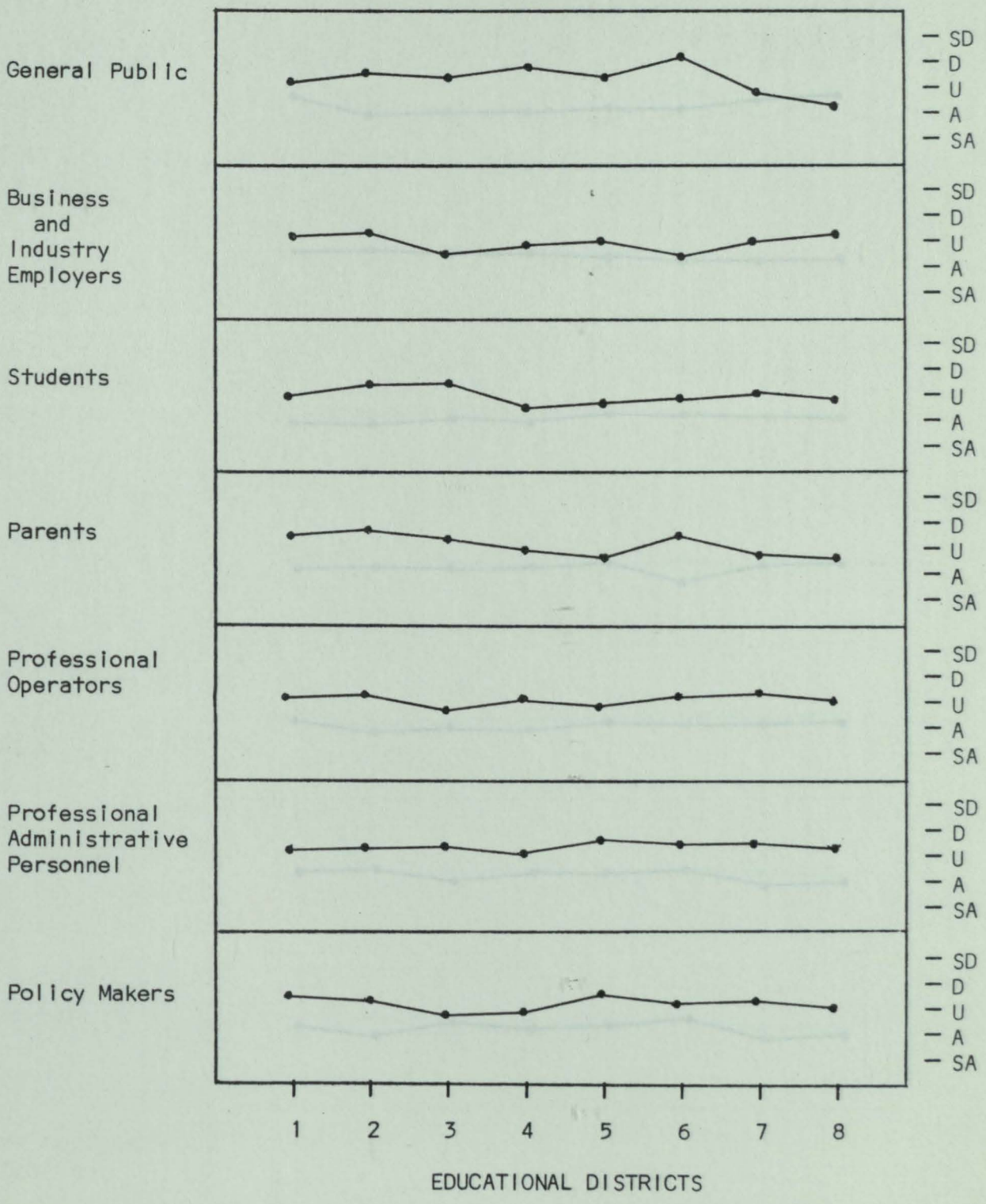
29. Occupational education is designed for somebody else's children, not mine.



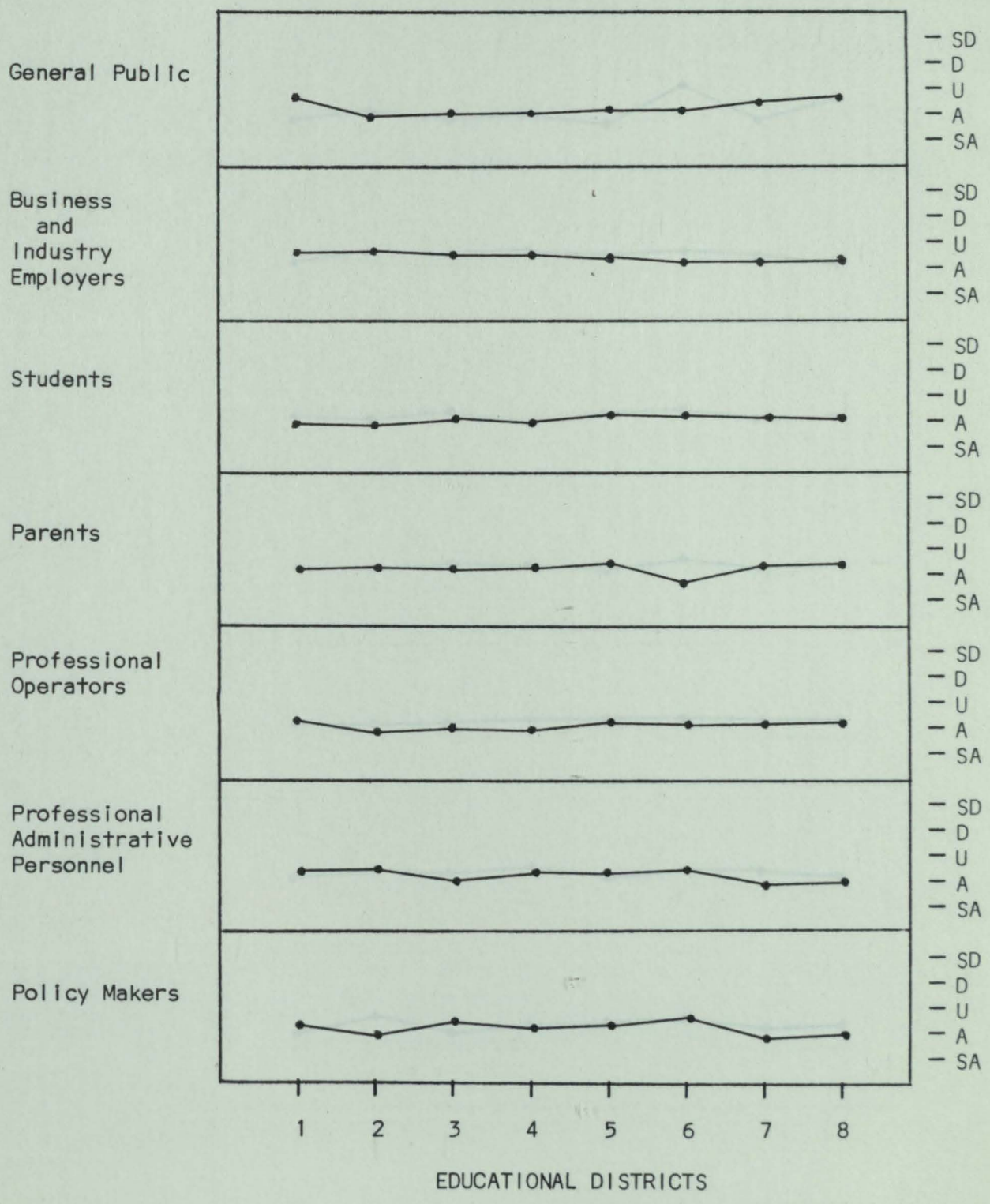
30. At the community college level, students are prepared to enter specific occupations.



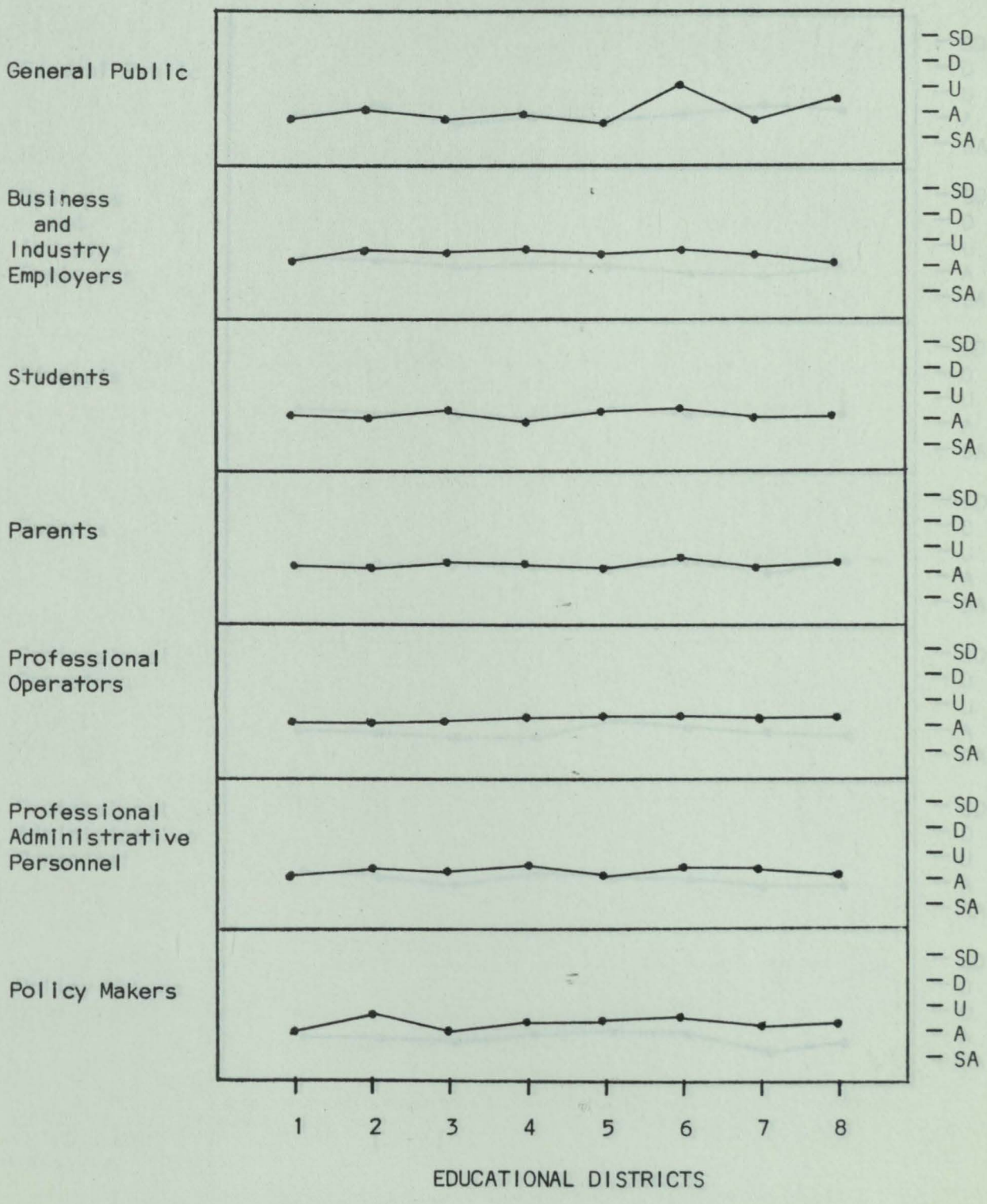
31. Local citizens are not involved in planning occupational education programs.



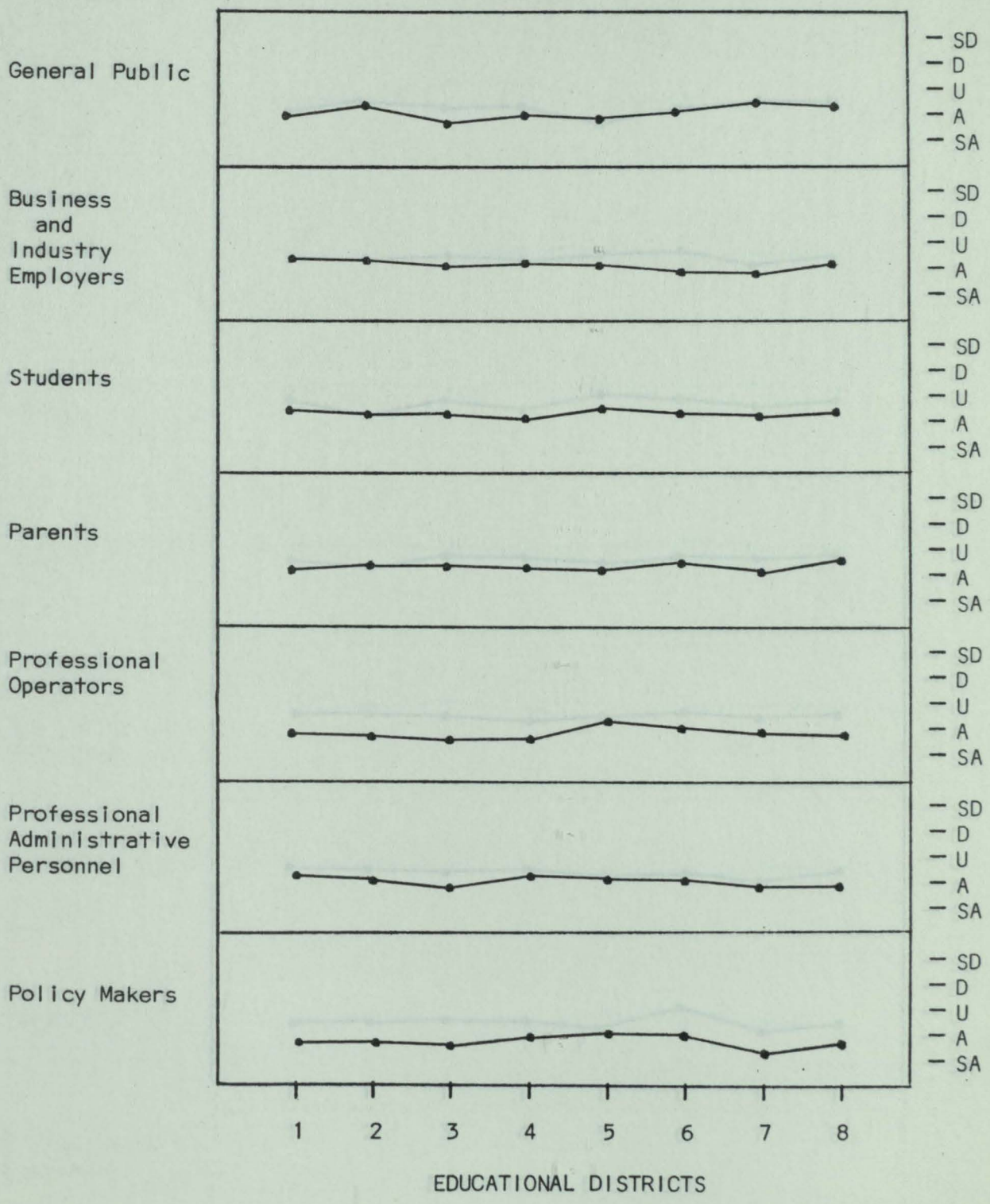
32. Occupational education programs develop attitudes and work habits which lead to personal fulfillment.



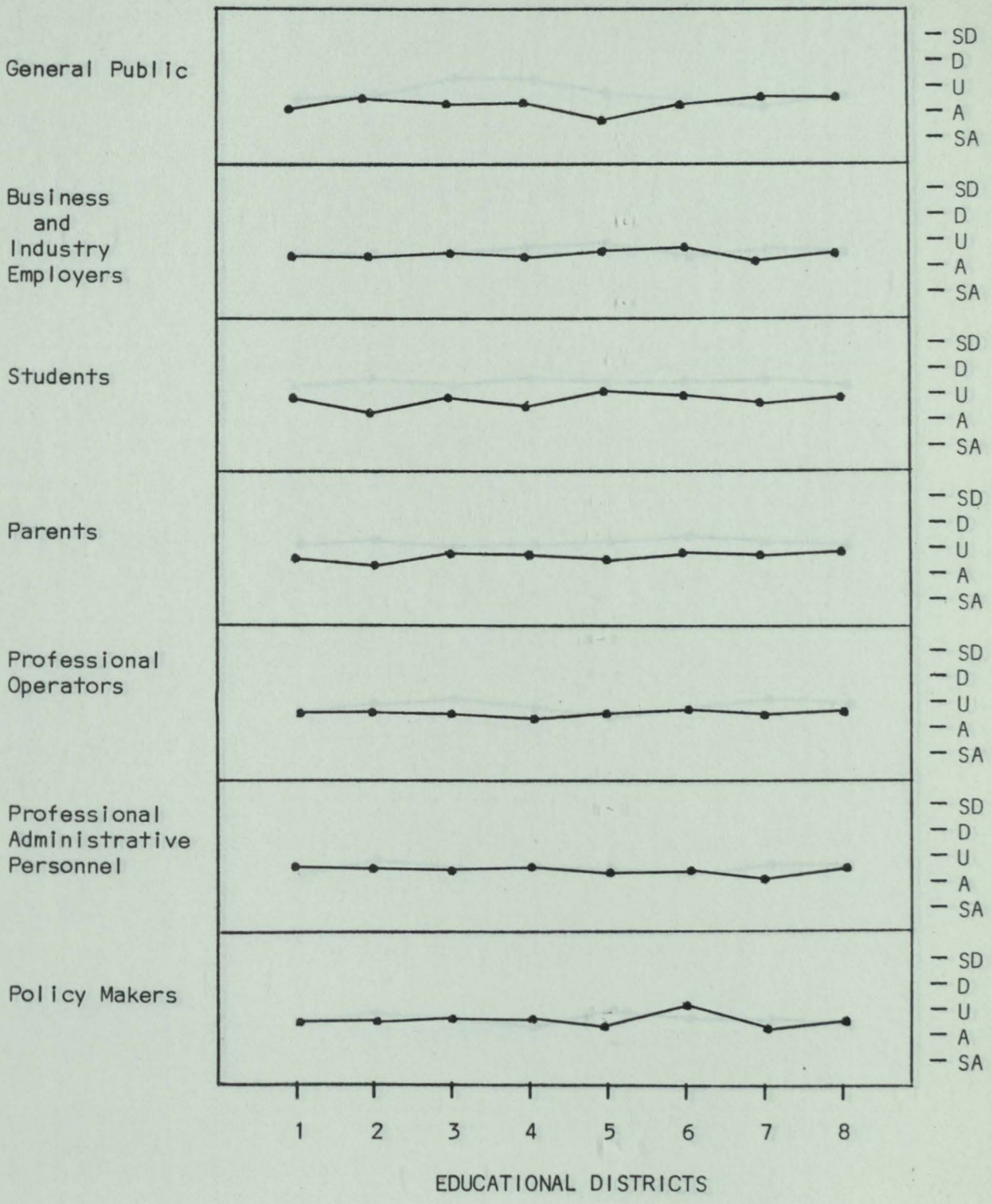
33. Occupational education programs prepare students for entry into technical institutes.



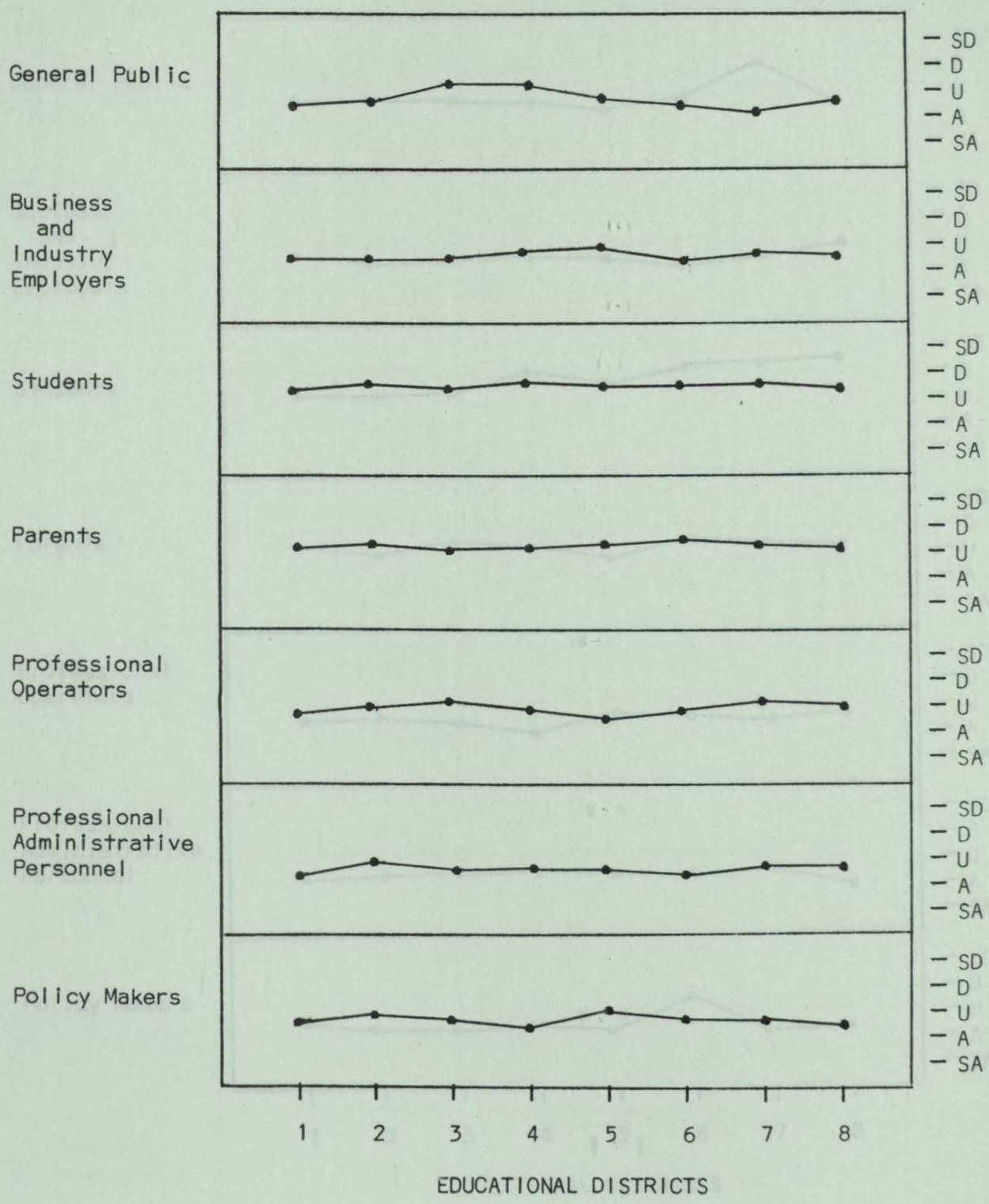
34. Occupational education programs reduce the dropout rate in the public schools.



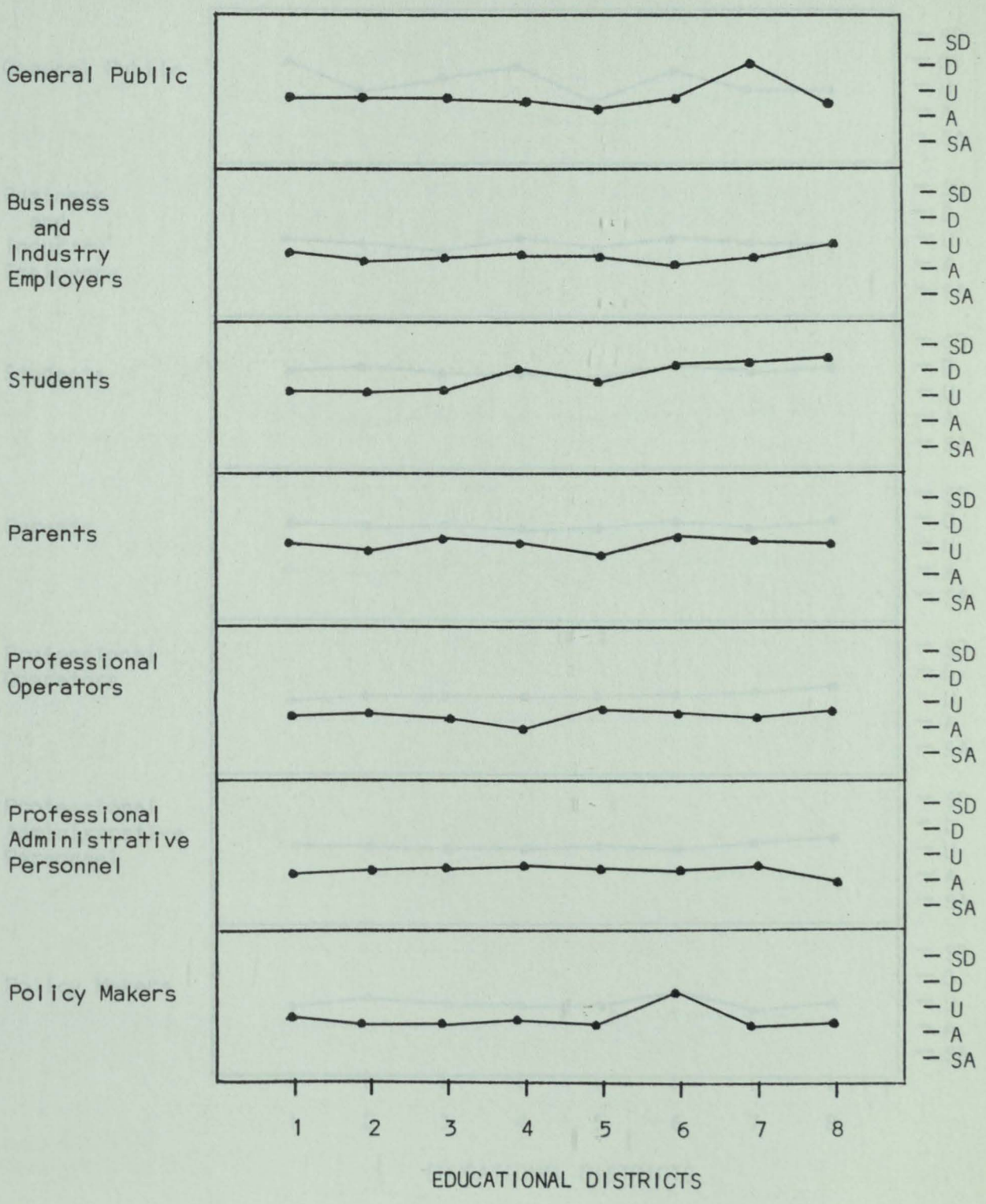
35. Occupational education programs are supported by the general public.



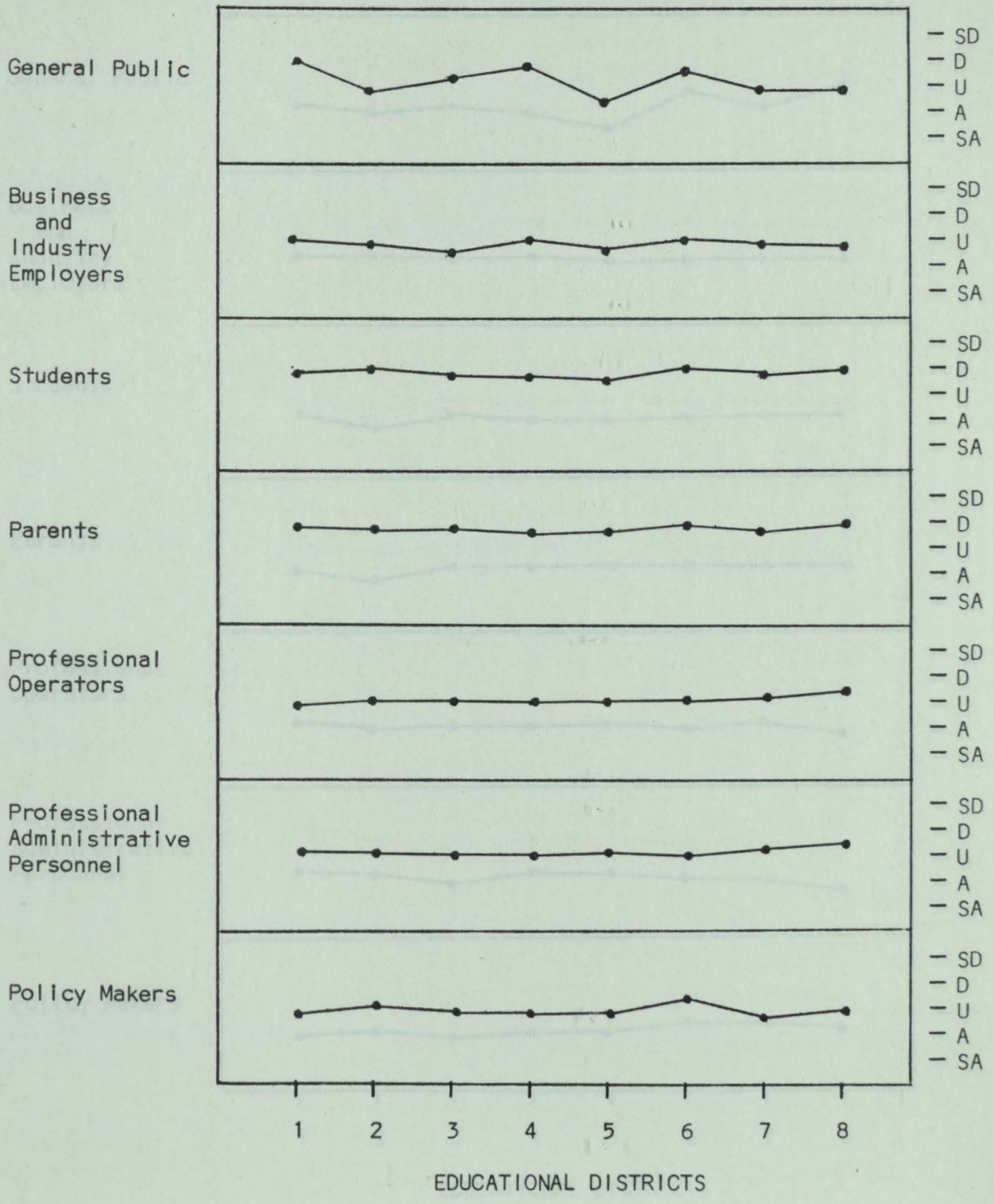
36. Occupational education programs in the public schools, community colleges, and technical institutes are not coordinated.



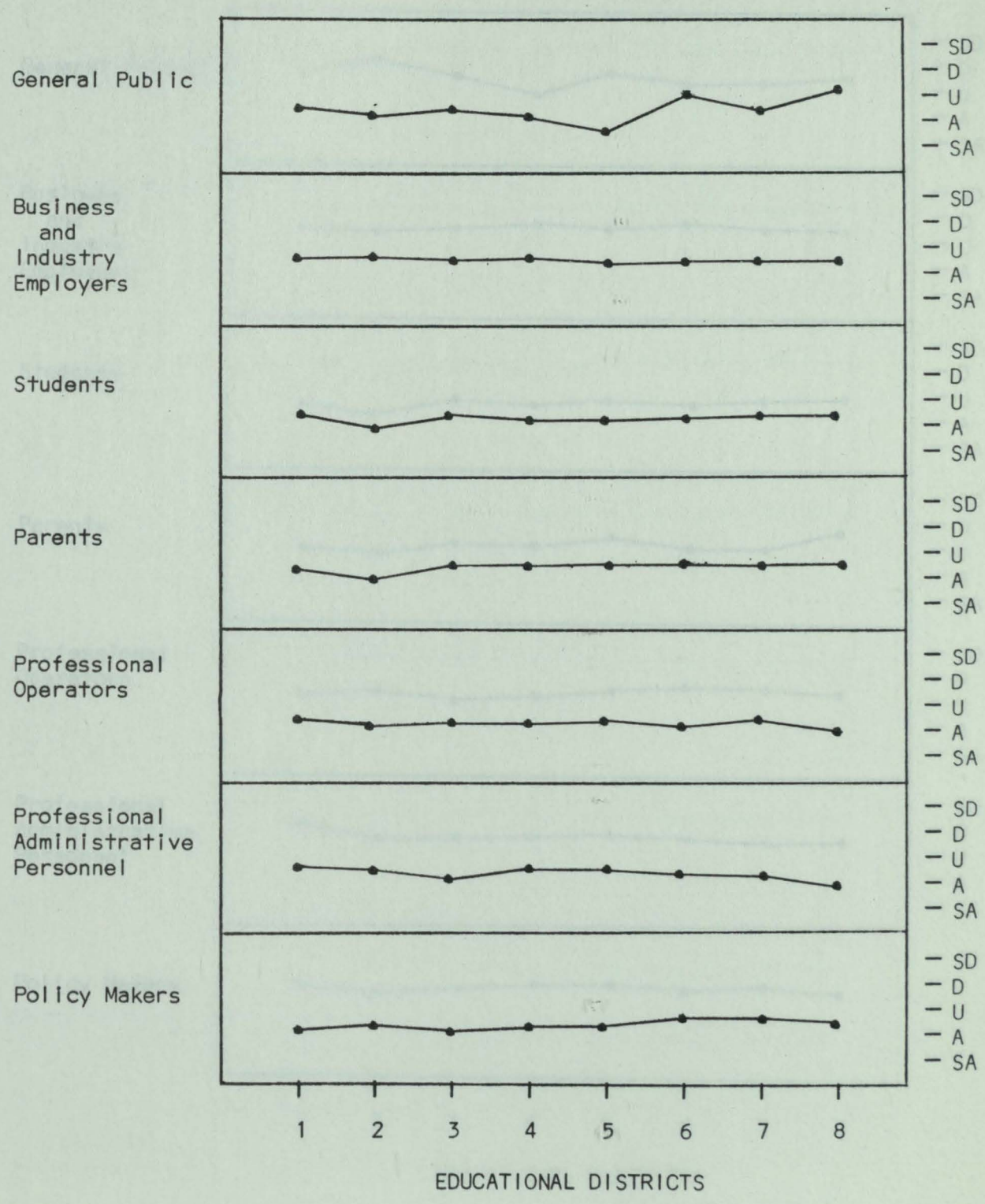
37. In high schools there is too much emphasis on preparing students for college.



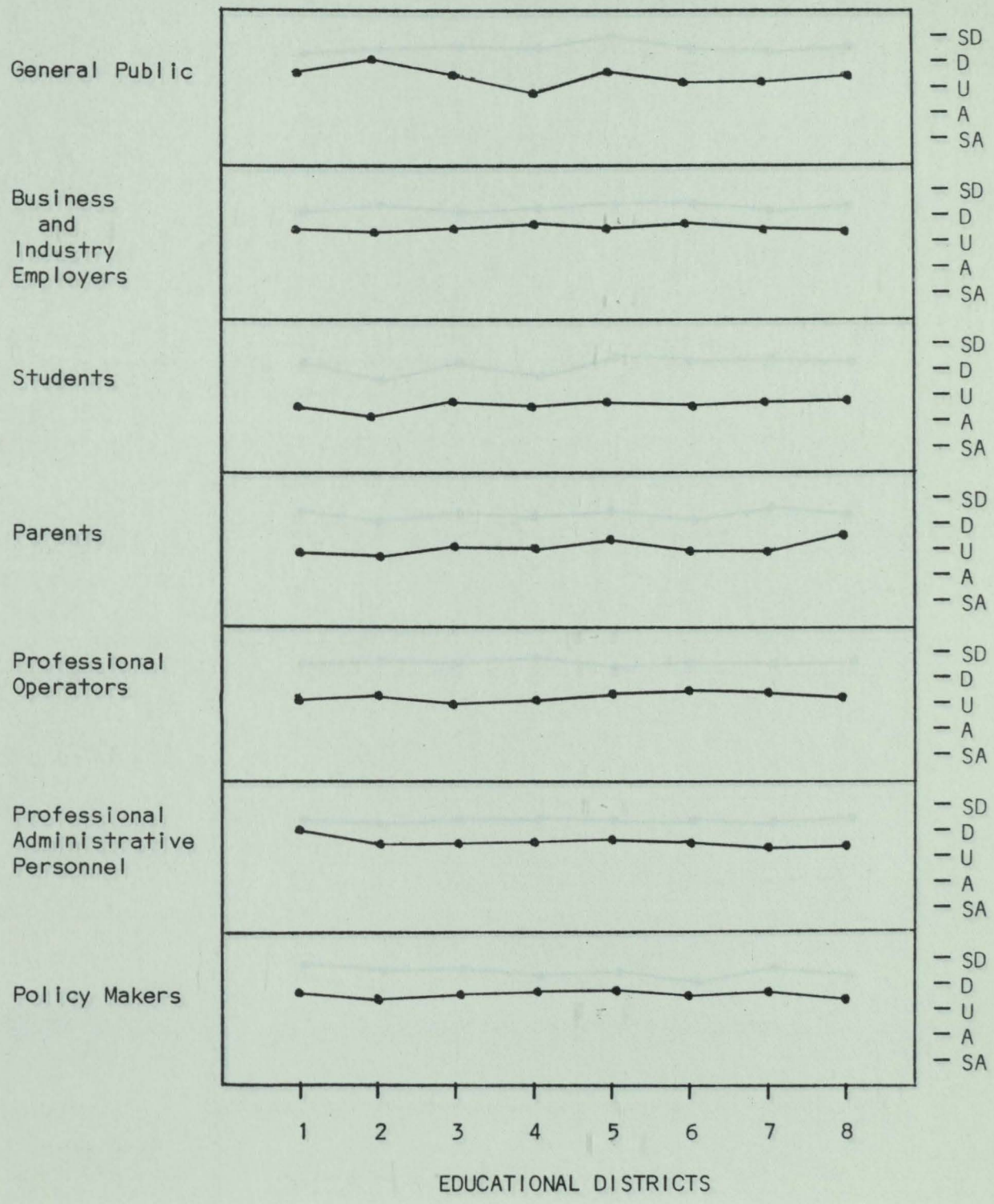
38. High school students planning to go to college do not take occupational education courses.



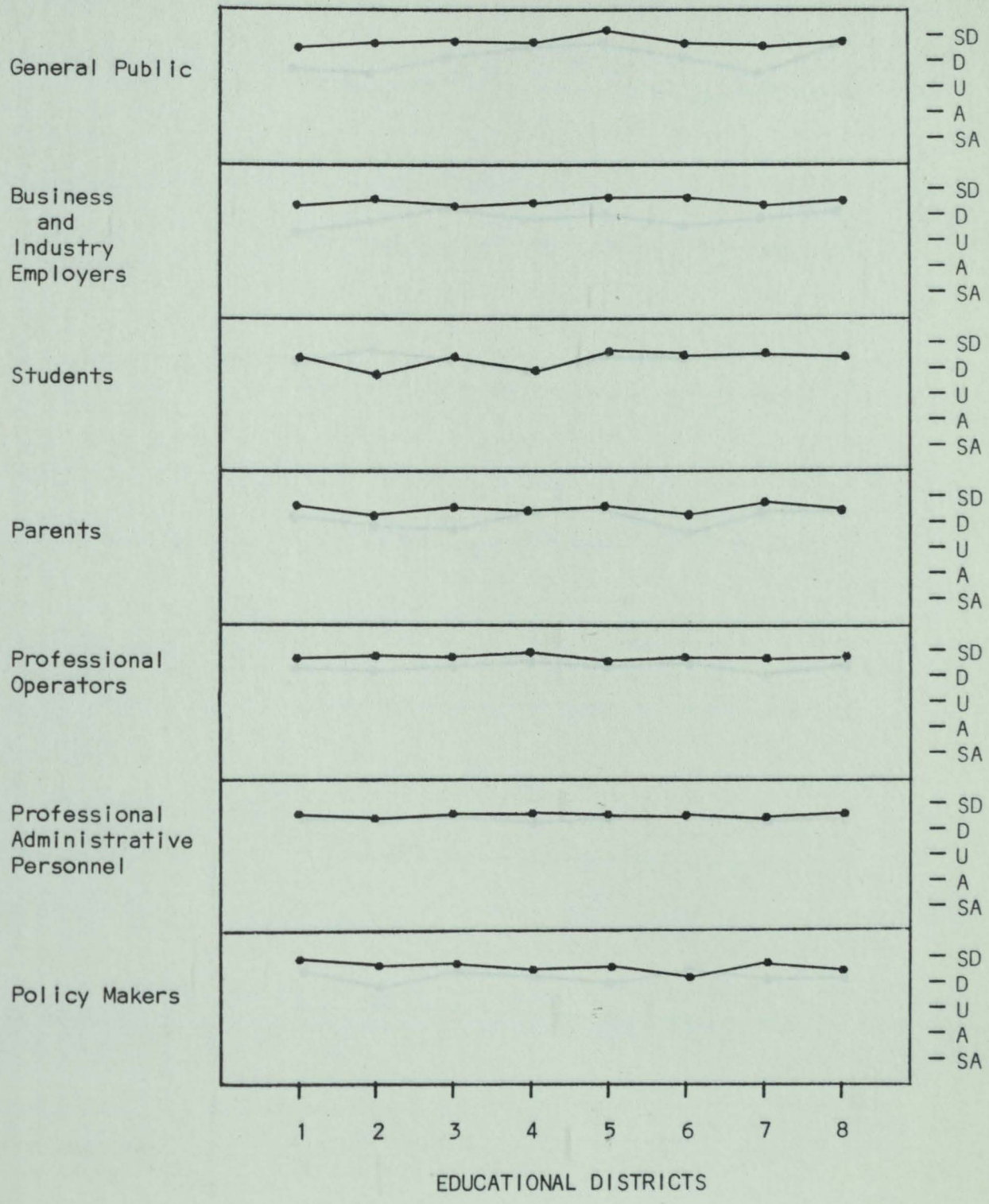
39. Occupational education programs are concerned about the needs of individual students.



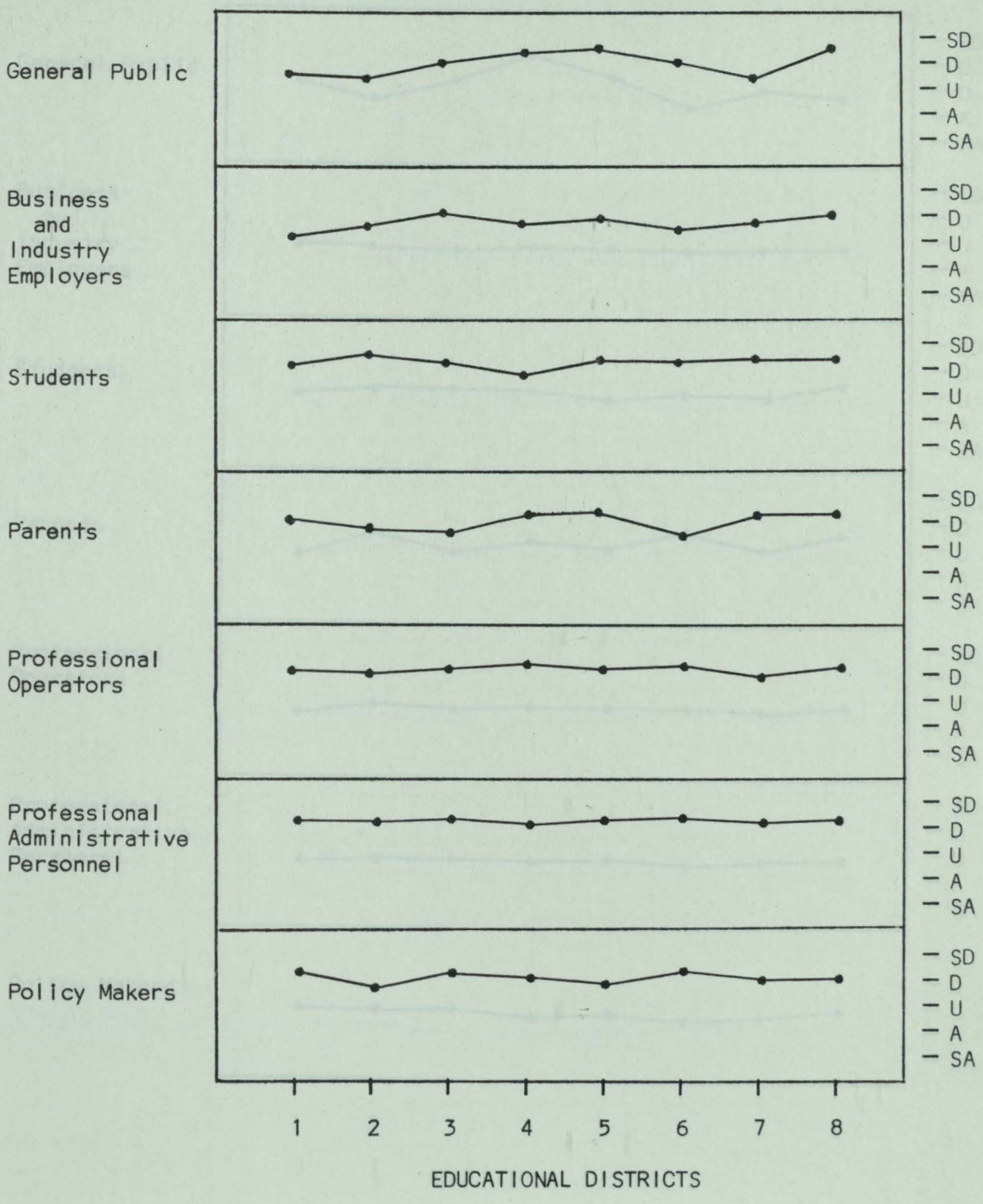
40. Occupational education programs are meeting the manpower needs of society.



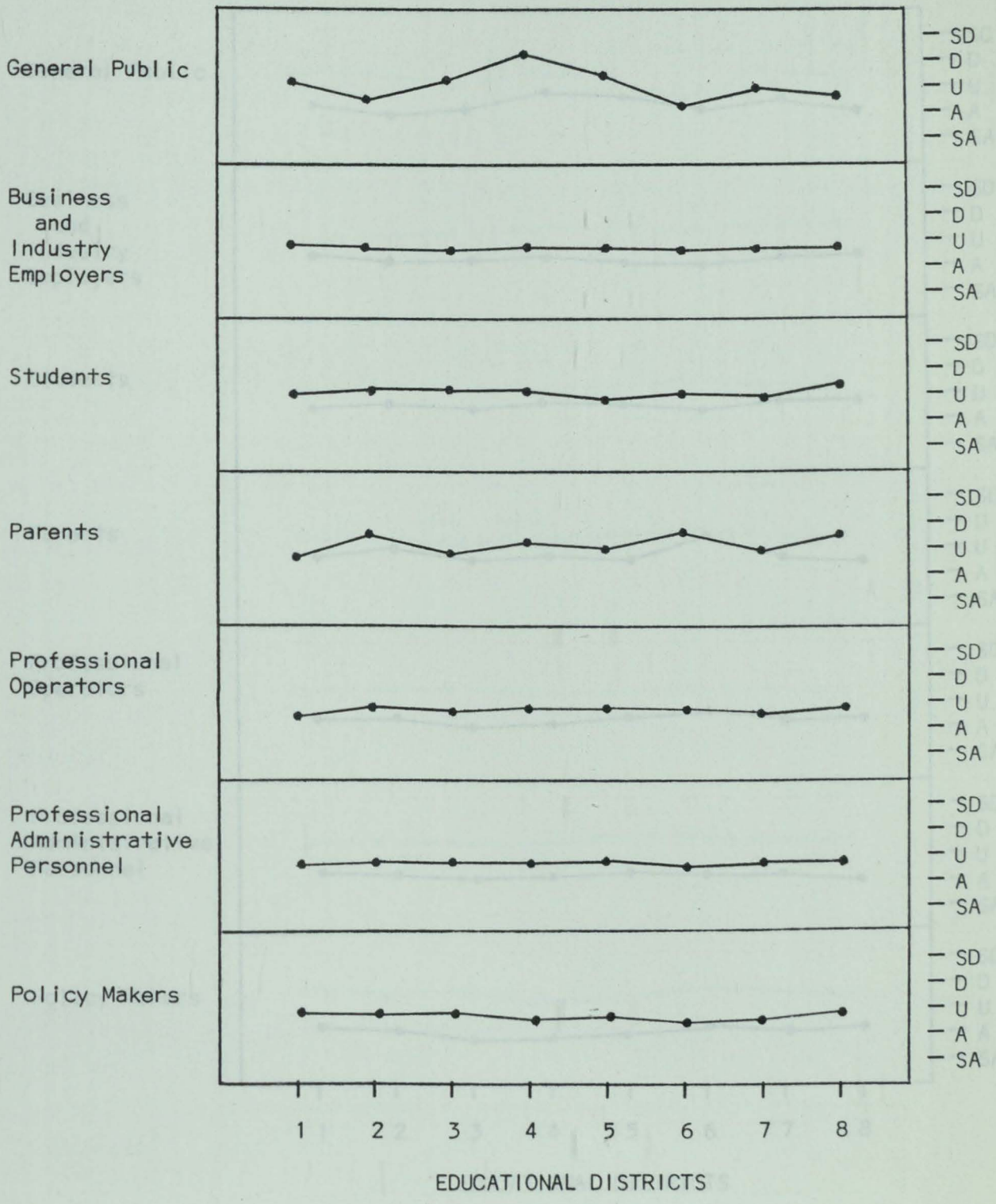
41. A college degree guarantees success in our society.



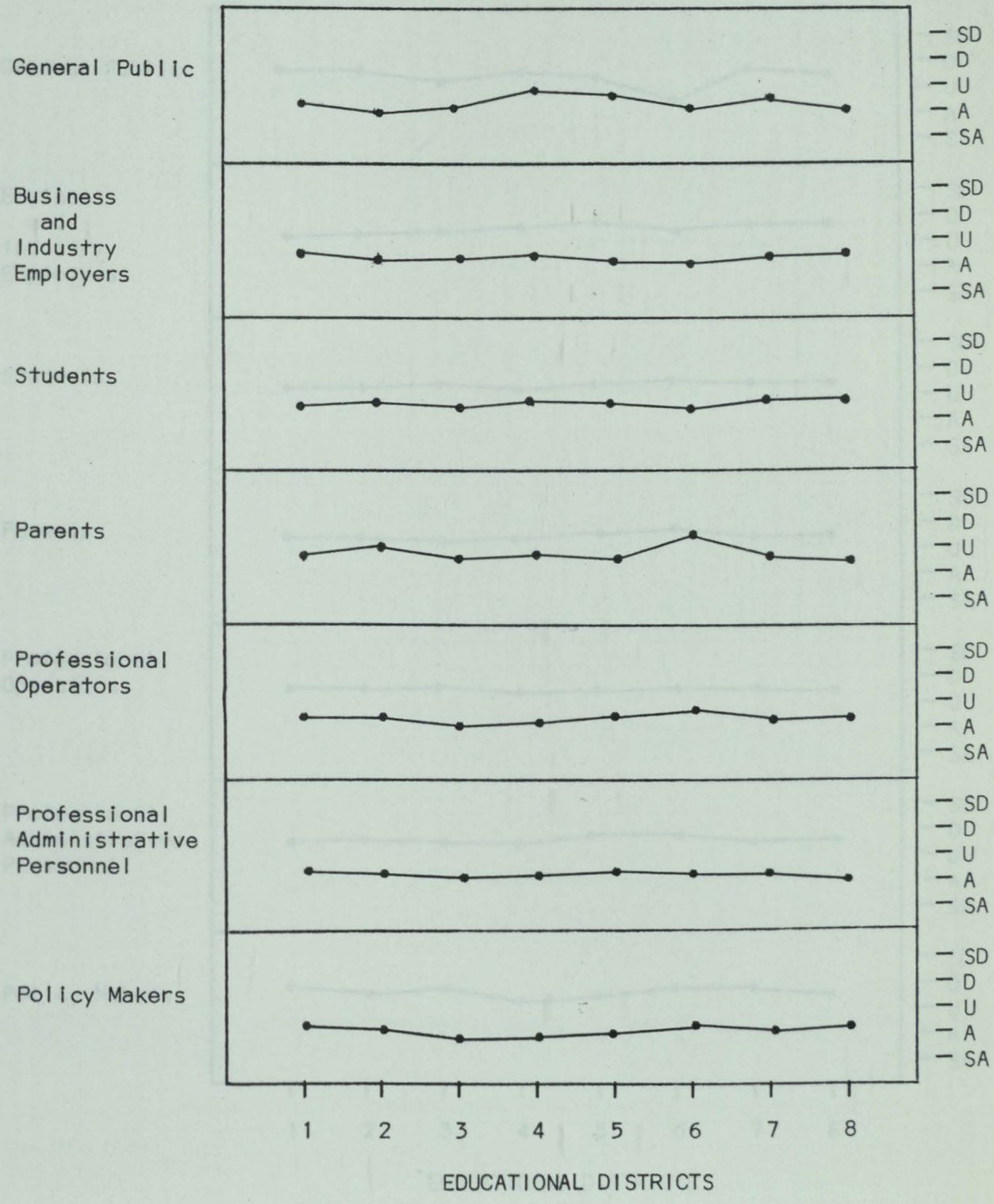
42. Occupational education programs are useful primarily to students of low intelligence.



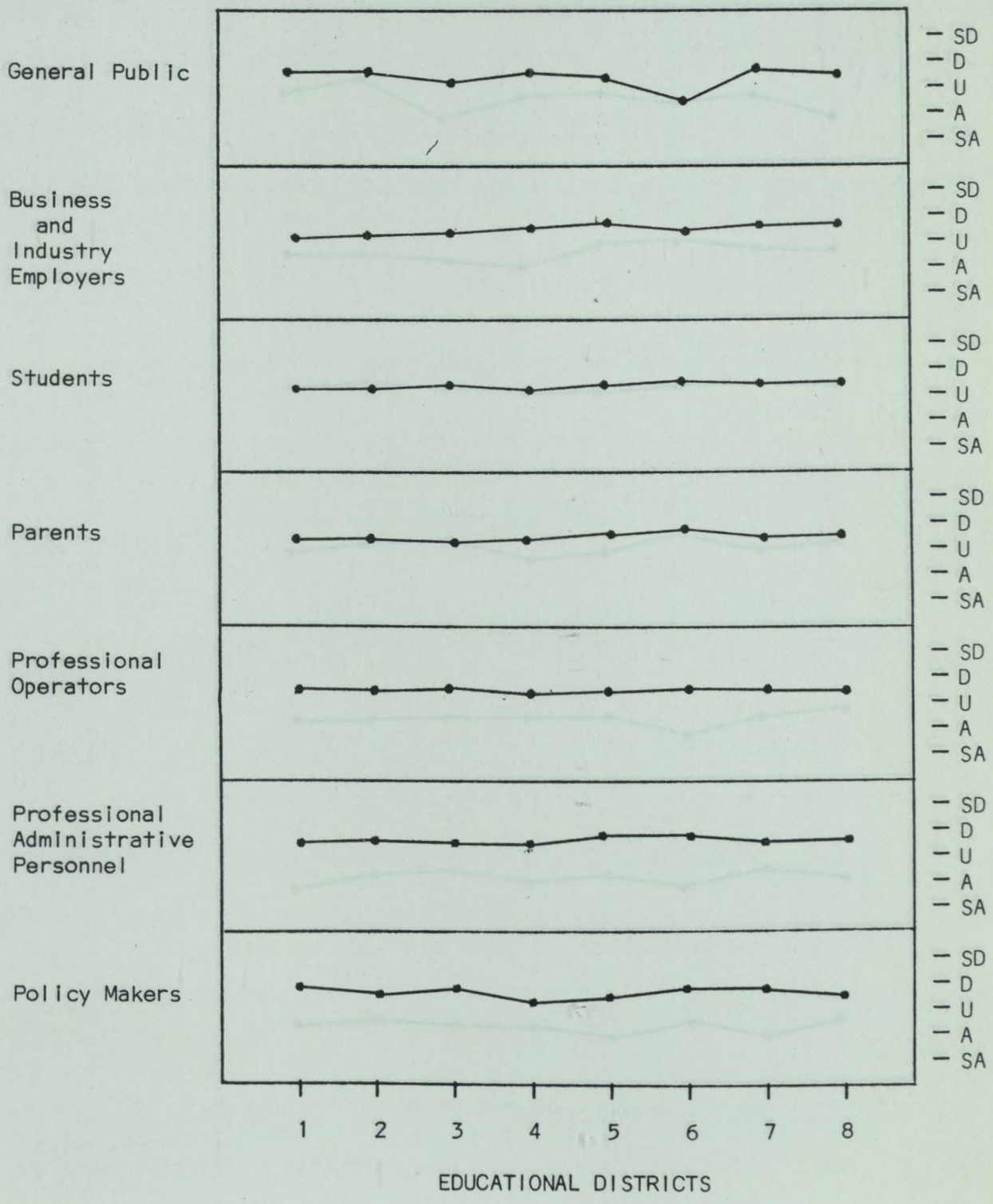
43. Occupational education is not held in high esteem by many students and educators.



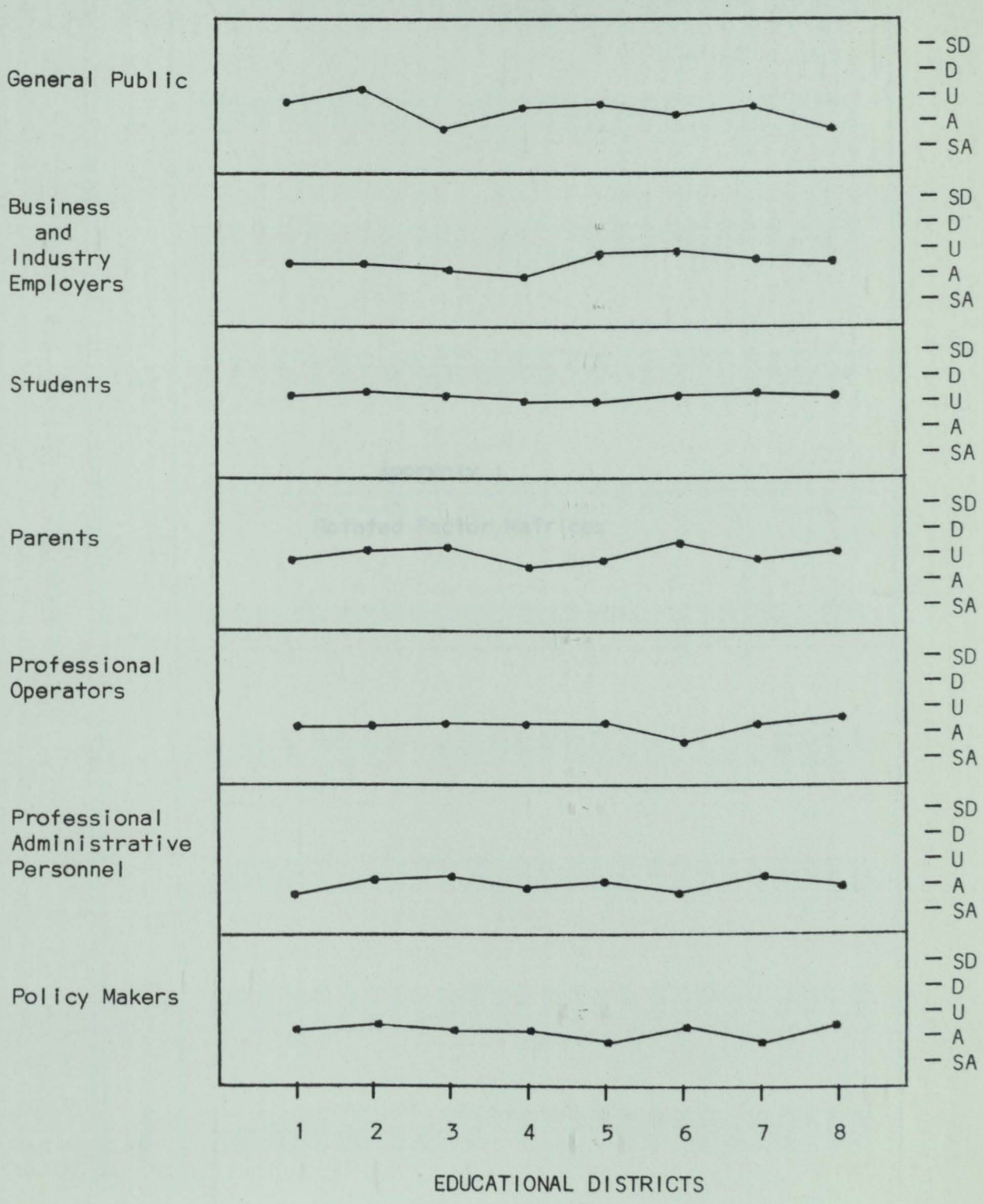
44. Current educational practices clearly favor those who are academically oriented.



45. Occupational education programs are concerned primarily with the needs of the employer.



46. Guidance services are inadequate for students in the public schools.



APPENDIX I

Rotated Factor Matrices

Rotated Factor Matrix - All Groups

Items	1	2	3	4	5	6	7	8	9	10
Q1	.334	-.069	.031	.032	.045	.275	-.135	-.195	-.199	.169
Q2	-.155	.152	-.032	-.059	-.018	.098	.479	.392	-.002	.075
Q3	.549	-.004	.017	.176	.075	.081	-.048	-.198	.005	.138
Q4	-.028	-.021	-.080	.054	-.171	-.040	.668	-.069	.023	-.017
Q5	-.034	.142	-.008	.032	-.111	.090	.699	.033	.028	-.051
Q6	.168	-.067	-.017	.724	.033	-.090	-.026	-.000	-.063	-.030
Q7	.171	-.332	.182	.214	-.261	.247	-.181	.008	-.361	.130
Q8	.114	-.047	-.501	.000	.084	.029	.342	-.003	-.232	-.239
Q9	.020	.560	-.171	.063	-.131	.000	.125	.092	-.009	.008
Q10	.653	-.028	.097	.107	-.026	.079	.000	-.121	-.056	.057
Q11	.440	.068	-.007	.122	.019	.155	.120	-.474	-.112	.163
Q12	-.069	-.018	-.329	.045	-.151	.329	.263	-.119	.060	.131
Q13	.170	.112	.079	.715	.057	.088	.107	-.063	-.064	.160
Q14	-.227	.153	-.348	.012	-.385	-.071	.277	-.214	-.226	.012
Q15	-.036	.128	-.667	-.073	-.119	-.100	.010	.062	.014	.019
Q16	.131	-.175	-.007	.128	-.006	.131	.021	-.073	-.118	.653
Q17	.257	.015	.006	.126	.088	-.022	-.019	-.024	-.146	.692
Q18	.094	.149	-.058	.040	-.631	.180	-.006	.023	.084	-.042
Q19	-.044	.130	-.117	-.081	-.603	-.024	.149	-.023	-.082	.127
Q20	.113	.107	-.023	.713	-.004	.072	.007	.088	-.024	.216
Q21	.452	.201	-.169	.030	-.287	-.301	.070	.072	-.033	-.014
Q22	-.237	.241	-.352	.088	-.421	.030	.119	-.081	-.009	.012
Q23	.443	.016	-.065	.043	.022	-.086	.056	.135	-.046	.482
Q24	.409	-.125	.066	.094	-.002	.086	-.115	.066	-.019	.621
Q25	.557	-.088	.046	.168	.013	.131	-.048	.110	-.033	.386
Q26	-.018	.294	-.180	-.128	-.551	-.091	.051	-.043	.094	-.177

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.512	.074	-.241	.148	-.008	-.189	-.166	.165	-.160	.117
Q28	.391	.212	.008	-.018	-.346	-.180	.090	.266	.198	.045
Q29	-.108	.404	-.429	.039	-.055	.129	.065	-.005	.057	.059
Q30	.203	.134	-.070	.232	-.033	.033	.049	.426	-.184	.169
Q31	.041	.202	.032	-.013	-.503	.092	.189	.280	-.082	-.140
Q32	.640	.003	.057	.025	-.073	.117	-.086	.177	-.082	.260
Q33	.302	.064	.007	.100	-.044	.093	-.081	.242	-.590	.106
Q34	.522	.261	-.009	.052	.064	-.150	.035	-.004	-.327	.017
Q35	.175	.224	-.051	.054	.045	-.067	.039	-.113	-.690	.182
Q36	-.108	.539	-.012	.068	-.193	-.003	.138	-.159	-.244	-.021
Q37	.093	.664	.052	.023	-.071	-.009	-.020	-.076	-.012	-.034
Q38	.003	.622	-.257	-.025	-.015	-.022	.034	.085	-.002	-.027
Q39	.518	.104	.152	.091	.082	.245	-.084	.001	-.179	.115
Q40	.314	-.092	.117	.030	.048	.445	.014	.092	-.329	.226
Q41	-.046	-.177	-.343	-.067	-.052	.424	.112	-.112	-.003	.150
Q42	.022	-.048	-.620	.012	-.130	.154	-.062	.044	.041	-.044
Q43	-.027	.616	.017	.008	-.191	.086	-.042	.191	-.103	-.014
Q44	.120	.687	.043	-.009	-.096	.027	.002	-.003	.012	-.036
Q45	.156	.181	-.126	.059	-.094	.582	.063	.071	.041	-.062
Q46	.088	.537	.109	.050	-.137	-.099	.047	.035	-.040	-.132

Rotated Factor Matrix - Policy Makers

Items	1	2	3	4	5	6	7	8	9	10
Q1	.055	.115	.179	-.048	-.028	.190	-.120	.144	-.537	.157
Q2	.004	-.009	.158	.257	.099	-.086	-.146	.064	.146	-.600
Q3	.231	.122	-.028	-.016	.047	-.050	.020	-.139	-.643	.203
Q4	-.121	.020	.109	-.020	.134	.066	-.189	.096	.086	-.206
Q5	.005	.002	-.011	-.031	.014	.202	.056	-.017	.149	-.777
Q6	.065	.099	-.129	.092	.734	-.084	.035	-.018	-.090	.083
Q7	.193	.237	.313	-.169	.221	.414	.062	-.118	-.252	.163
Q8	-.033	.060	.027	.078	-.051	-.066	-.872	.072	.029	-.045
Q9	.216	-.461	-.108	.103	.062	.168	-.108	-.060	.326	-.042
Q10	-.011	.012	-.111	-.068	-.012	-.026	.027	.058	-.696	.158
Q11	.195	.002	.004	.020	.288	.090	-.048	-.328	-.394	-.060
Q12	-.055	.042	.788	.020	.026	-.049	.009	.142	.108	-.078
Q13	-.006	-.041	.031	-.045	.656	.003	.060	-.122	-.446	-.140
Q14	-.136	.009	.109	.057	.006	.209	-.067	.077	.277	-.069
Q15	.205	-.039	.122	-.074	-.042	-.073	-.048	.758	.051	.005
Q16	.737	.072	.050	-.016	.147	.040	.031	.249	-.153	.101
Q17	.627	-.029	.022	.029	.155	-.333	.010	.060	-.247	-.209
Q18	-.051	-.368	.098	.277	-.028	.602	.047	-.110	.089	-.076
Q19	-.090	-.026	-.124	.015	-.069	.787	.065	.021	-.003	-.130
Q20	.127	-.079	.047	-.139	.658	-.040	.021	-.022	.138	-.081
Q21	.010	-.138	-.017	.051	-.013	.058	.120	.042	-.150	.070
Q22	-.123	-.102	.256	.170	-.091	.126	-.083	-.072	.675	.010
Q23	-.025	-.051	.083	.006	.103	-.127	.021	.063	-.062	-.061
Q24	.377	.150	-.128	.011	.009	-.027	.063	-.019	-.232	-.048
Q25	.185	.093	.068	-.125	.242	-.041	-.247	-.210	-.171	.084
Q26	.060	-.222	-.094	.120	-.340	.554	.023	-.172	.134	-.032

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.429	.004	-.030	-.257	-.027	.019	.036	-.098	-.106	.120
Q28	.015	-.043	-.176	.064	.196	.350	-.084	.109	.004	-.018
Q29	.156	-.032	.224	.146	.002	.046	-.304	.238	.200	-.134
Q30	.170	.087	-.230	-.014	.018	.159	-.053	.254	.113	.001
Q31	-.101	.002	-.070	-.020	-.197	.263	-.239	-.048	.077	-.405
Q32	.056	.192	.088	-.147	-.038	.265	.065	-.047	-.151	.018
Q33	-.026	-.095	.013	-.760	.135	-.063	.098	.200	.070	.035
Q34	-.018	-.067	-.167	-.365	.060	-.007	.020	-.005	-.206	-.172
Q35	.047	.073	-.013	-.749	-.081	-.112	-.066	-.030	-.150	.095
Q36	.032	-.449	-.069	-.002	-.176	.023	-.382	-.409	.170	-.083
Q37	-.166	-.755	-.015	-.128	.028	.041	.066	-.158	-.135	.172
Q38	.071	-.651	-.106	-.115	-.074	.196	-.017	.166	.133	-.300
Q39	.065	-.147	.173	-.511	.082	.040	.209	-.241	-.253	.037
Q40	.163	.155	-.125	-.246	.090	.077	-.193	-.062	-.165	.143
Q41	.389	.080	.540	-.126	-.227	-.170	-.109	-.005	.118	-.028
Q42	.062	-.201	.070	.048	-.328	-.021	-.329	.490	-.149	-.268
Q43	-.048	-.541	-.230	.029	.033	.222	.001	.160	.348	.049
Q44	-.032	-.677	.134	.047	-.023	-.067	.085	.139	.060	-.029
Q45	-.036	-.077	-.035	-.048	-.011	.025	.068	.016	.079	.081
Q46	-.241	-.329	-.021	-.021	.274	.457	-.271	.055	.128	-.001

Rotated Factor Matrix

Items	11	12	13	14	15	16
Q1	.214	.398	-.083	.089	.059	-.120
Q2	-.027	-.174	-.049	.007	-.139	-.009
Q3	-.073	.116	-.009	.040	.117	-.049
Q4	.008	.092	.200	.079	-.619	-.017
Q5	.055	.183	-.074	.082	-.037	-.154
Q6	.075	.000	-.102	.046	-.218	-.161
Q7	.084	.021	-.119	-.083	.027	.281
Q8	.092	.019	-.012	.007	-.118	.009
Q9	.026	.090	.055	.203	-.141	-.134
Q10	-.198	.047	-.097	-.281	-.071	-.175
Q11	-.011	.083	.180	-.151	-.168	-.390
Q12	.093	.095	-.050	.072	-.071	.089
Q13	.035	.055	-.034	.096	-.110	.304
Q14	-.256	-.044	.054	.655	-.074	.116
Q15	-.099	.023	.060	.093	-.215	-.028
Q16	.129	.085	.113	-.126	-.040	.068
Q17	-.083	.165	-.199	-.095	.114	-.109
Q18	.018	-.059	.040	-.176	-.210	-.149
Q19	-.130	-.050	.011	.028	-.012	.009
Q20	-.088	.095	.129	-.108	.155	-.037
Q21	-.846	.101	.003	-.010	-.058	-.056
Q22	-.009	-.090	.069	.242	-.110	-.032
Q23	-.061	.801	-.007	-.124	-.182	-.108
Q24	-.056	.642	.068	-.099	.213	.142
Q25	-.174	.469	.047	-.488	.067	.119
Q26	-.279	-.069	.082	.142	-.078	.176

Rotated Factor Matrix

Items	11	12	13	14	15	16
Q27	-.420	.410	-.085	.015	.049	-.104
Q28	-.548	.117	-.078	-.119	.300	-.012
Q29	-.154	-.194	.524	.174	-.125	-.175
Q30	-.000	-.085	-.329	-.405	-.486	.148
Q31	-.467	-.129	.094	-.013	-.061	.245
Q32	-.279	.239	-.009	-.638	-.051	-.068
Q33	-.064	.100	.117	-.205	-.013	.117
Q34	-.035	.055	.126	-.077	.036	-.680
Q35	.077	-.068	-.049	.090	-.051	-.260
Q36	-.087	-.151	.052	.274	-.180	-.124
Q37	-.125	-.014	.029	.076	.010	.122
Q38	-.080	.166	.153	.049	-.070	.203
Q39	.225	.025	-.033	-.182	.054	-.155
Q40	.446	.135	.411	-.201	.030	-.016
Q41	-.061	-.134	.167	-.119	.079	.013
Q42	.043	-.051	.077	.025	.254	.035
Q43	-.097	.068	-.116	.164	.072	-.157
Q44	-.006	-.257	-.005	-.130	.177	-.181
Q45	.059	.028	.819	.024	-.053	-.037
Q46	.007	-.076	.061	.033	.252	-.300

Rotated Factor Matrix - Administrative Personnel

Items	1	2	3	4	5	6	7	8	9	10
Q1	.151	.164	-.004	.280	-.133	-.134	.075	-.209	-.222	-.071
Q2	.103	-.060	.019	.059	.247	-.135	-.183	-.201	.491	.262
Q3	.315	-.024	-.055	.115	-.062	.111	-.004	.008	.056	-.043
Q4	-.242	-.024	.168	.199	-.008	-.042	-.124	-.113	.626	-.012
Q5	-.202	-.023	.126	-.141	.174	-.387	.043	-.205	.400	.190
Q6	.285	-.071	-.027	.119	-.602	.024	.048	-.027	.035	-.182
Q7	.165	.002	.079	.162	-.043	.089	.763	.014	-.006	.013
Q8	-.058	.030	.223	-.115	.009	-.062	-.033	-.707	.096	.023
Q9	.001	.617	.073	-.010	-.059	-.086	-.011	-.063	.033	.046
Q10	.581	-.091	.001	.011	-.228	.006	.083	.209	-.041	.321
Q11	.519	-.039	-.032	.010	-.205	-.285	.196	.189	.030	-.084
Q12	-.054	-.065	.483	.069	-.130	-.277	-.044	.039	.060	-.135
Q13	.159	.014	.037	.097	-.729	-.062	.046	.073	-.107	.261
Q14	-.129	.181	.393	-.071	-.071	.036	.122	-.224	.455	-.251
Q15	-.075	-.095	.224	-.039	.018	-.110	-.181	-.384	.124	.133
Q16	.071	.006	.173	.706	-.111	-.061	-.012	.177	.091	.043
Q17	.129	-.058	-.076	.716	-.224	-.060	.155	-.090	-.119	-.025
Q18	.113	.245	.118	-.092	-.094	-.067	.137	-.026	.117	-.053
Q19	-.183	.252	.161	-.163	.129	-.218	.276	-.039	.243	.003
Q20	.038	-.008	-.017	.237	-.735	.050	-.014	-.058	-.075	.094
Q21	.220	.115	.060	-.125	.115	-.056	-.129	-.087	.017	.072
Q22	-.048	.183	.425	-.137	-.119	-.076	.016	-.208	.182	-.054
Q23	.449	.061	-.043	.314	-.120	.311	-.174	-.362	-.064	-.109
Q24	.202	-.072	-.203	.551	-.119	.036	.230	.018	-.038	.230
Q25	.382	-.075	-.063	.509	-.209	.182	-.029	-.052	-.194	.019
Q26	-.172	.165	.045	-.304	.030	-.181	.072	-.014	.494	.151

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.530	.001	-.154	.116	-.284	.091	.168	-.114	-.116	.023
Q28	-.041	.223	.068	-.008	-.264	.125	-.053	-.077	.181	.295
Q29	-.069	.196	.214	.098	.062	-.736	-.014	-.039	-.017	.063
Q30	.133	.167	.016	.065	-.129	-.029	.040	-.095	.066	.742
Q31	-.082	.225	.266	-.268	.046	-.195	.119	.010	.344	.004
Q32	.555	-.004	-.074	.001	-.077	-.135	.292	-.029	-.192	.265
Q33	.145	.131	-.168	.197	-.077	-.118	.416	-.535	-.058	.169
Q34	.654	.108	.175	.075	-.033	.110	.059	-.000	-.122	-.026
Q35	.206	.042	.055	.414	-.032	.050	.291	-.083	.133	-.190
Q36	.001	.361	-.064	-.077	.073	-.022	.044	.117	.630	-.028
Q37	-.091	.682	.046	-.035	-.014	.114	-.013	-.004	-.008	.113
Q38	-.002	.615	.234	-.024	.205	.054	-.118	.080	.106	.178
Q39	.685	-.060	-.044	.167	-.092	-.056	-.093	-.021	-.091	.023
Q40	.567	.002	-.049	.239	.015	-.093	.078	-.015	.133	.075
Q41	.141	-.081	.597	.104	.129	-.156	-.146	-.057	-.055	.174
Q42	-.038	-.063	.745	-.077	.039	-.009	.154	-.115	.088	.012
Q43	.091	.599	-.254	-.029	-.010	-.399	-.020	-.157	.120	.013
Q44	.032	.694	-.167	-.023	-.000	-.098	.119	-.030	.142	-.021
Q45	.237	-.011	.111	-.054	-.083	-.569	-.150	-.104	.286	-.072
Q46	.049	.179	-.164	-.006	.101	-.088	.141	.026	.098	-.060

Rotated Factor Matrix

Items	11	12	13	14
Q1	-.640	.102	.007	.070
Q2	.285	.184	.021	.129
Q3	-.697	-.065	.096	.071
Q4	.023	-.063	.103	-.354
Q5	-.082	-.095	.108	-.137
Q6	-.010	.171	-.091	.008
Q7	-.018	.003	.009	-.073
Q8	-.036	-.081	.036	-.039
Q9	.014	-.414	.172	-.230
Q10	-.295	.010	.085	-.004
Q11	-.177	-.295	-.046	.275
Q12	.152	-.206	.069	.127
Q13	-.092	-.209	.028	-.059
Q14	.261	-.192	.040	.023
Q15	.061	-.525	.034	.082
Q16	-.016	.017	-.065	.161
Q17	-.078	-.070	-.073	.002
Q18	.068	.050	.098	-.738
Q19	.015	-.350	.164	.016
Q20	-.037	.022	-.016	-.014
Q21	-.290	-.161	.577	-.147
Q22	.361	-.257	.104	.047
Q23	-.150	-.199	-.028	.084
Q24	-.286	.029	-.011	-.056
Q25	-.252	.010	.092	-.154
Q26	-.066	-.124	.242	-.308

Rotated Factor Matrix

Items	11	12	13	14
Q27	-.197	-.215	-.081	-.095
Q28	-.104	.070	.521	.214
Q29	.135	.006	.103	-.167
Q30	.076	-.010	.065	.024
Q31	-.020	.322	.196	.004
Q32	-.307	.011	-.076	-.121
Q33	-.078	-.037	.024	-.060
Q34	-.016	.043	.181	.164
Q35	-.033	-.518	.162	.017
Q36	.070	-.093	-.010	.066
Q37	-.032	.183	.312	.054
Q38	-.064	-.263	-.153	-.238
Q39	.060	.226	.252	-.152
Q40	-.141	-.063	-.270	-.121
Q41	.025	-.153	-.113	-.203
Q42	-.066	.118	-.066	-.089
Q43	.147	-.033	.016	-.046
Q44	-.068	.125	.095	-.041
Q45	-.208	-.065	-.128	.157
Q46	.113	-.057	.712	-.124

Rotated Factor Matrix - Professional Operators

Items	1	2	3	4	5	6	7	8	9	10
Q1	.102	.036	-.074	.058	.069	-.014	.170	-.129	-.103	.181
Q2	.104	.054	.121	.032	.418	-.046	.074	-.302	-.213	-.497
Q3	.318	-.158	-.156	.281	-.007	.122	.353	.206	-.351	.158
Q4	-.468	.186	-.019	.128	.035	.124	.085	.158	-.156	-.514
Q5	.002	.126	-.063	.091	-.002	-.159	-.071	.046	.000	-.694
Q6	.059	-.094	.064	.729	-.234	-.074	.023	-.141	.006	.081
Q7	.227	-.067	.034	.438	-.063	.023	.227	-.124	.289	.055
Q8	-.212	-.148	-.037	-.117	.198	-.184	-.110	.083	-.572	.006
Q9	-.017	.091	.080	.050	.760	-.033	-.033	.024	.076	-.004
Q10	.607	-.014	-.007	.241	-.075	.221	.157	.045	-.035	-.063
Q11	.266	-.205	-.089	.159	-.223	-.128	.173	.053	-.457	-.064
Q12	-.003	.194	.024	-.004	-.013	-.036	.053	-.075	-.699	-.100
Q13	.048	-.083	-.079	.773	.091	.088	.109	.176	-.062	-.130
Q14	-.101	.186	-.036	.045	.125	-.528	-.117	-.163	-.293	-.254
Q15	-.037	.605	.329	-.130	.119	-.110	-.099	-.103	-.065	.073
Q16	.075	-.007	.105	.135	-.025	-.088	.623	.080	.018	-.062
Q17	.185	-.066	-.066	.056	-.088	-.002	.815	.070	.002	-.049
Q18	.079	.462	-.418	.066	.176	-.262	.112	.033	-.130	-.011
Q19	-.072	.594	-.066	-.126	.111	-.315	.140	.003	.007	-.297
Q20	.105	.086	-.021	.724	.100	-.041	.168	.196	-.009	-.089
Q21	.085	.153	.107	-.069	-.094	-.181	.125	.287	-.133	-.272
Q22	-.132	.147	-.112	.003	.062	-.790	-.053	.094	.029	-.126
Q23	.497	.194	-.075	.067	.002	.081	.301	.164	-.161	.074
Q24	.304	-.087	-.156	.175	-.054	.090	.705	.041	-.042	.135
Q25	.205	-.112	.069	.164	.084	.164	.588	.302	-.069	.093
Q26	-.285	.450	-.064	-.121	.162	-.162	-.150	-.169	-.059	-.144

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.421	.107	.033	.094	.070	.011	.162	.177	.025	.306
Q28	.109	.175	-.158	.025	.089	.054	.022	-.047	.078	-.038
Q29	.054	.362	-.051	.026	.034	-.176	-.198	.037	-.040	-.038
Q30	.119	-.005	-.074	.184	.112	-.022	.245	.702	.016	.037
Q31	-.088	.644	-.141	.072	.031	.032	-.197	.078	.004	-.126
Q32	.569	-.023	-.237	.036	-.121	.237	.264	.290	-.077	.109
Q33	.201	-.056	-.017	.063	-.186	.224	.184	.272	-.007	-.083
Q34	.566	-.193	.163	.119	.043	-.170	.179	.042	-.099	-.101
Q35	.476	-.139	.052	.007	.065	-.283	.023	.431	-.005	-.229
Q36	.038	.037	-.047	-.086	.401	-.042	-.116	-.206	.019	-.439
Q37	.156	.031	-.085	-.061	.346	-.087	-.018	.046	.030	-.024
Q38	.134	.247	.033	-.072	.560	-.109	-.136	.103	-.180	-.056
Q39	.656	-.115	.013	.046	.114	.164	.222	-.039	.149	.014
Q40	.159	-.047	-.040	.053	-.118	.113	.257	.237	-.129	-.054
Q41	-.036	-.066	.148	-.019	.046	-.074	.170	-.010	-.111	.015
Q42	-.207	.200	.411	.003	-.017	-.481	.041	-.022	-.205	.192
Q43	-.241	.018	-.285	-.028	.458	-.028	.116	.163	.138	-.078
Q44	-.058	.059	-.025	-.050	.219	-.022	-.040	-.041	.048	-.011
Q45	-.007	.055	-.739	.012	-.067	-.055	.048	.034	-.042	-.001
Q46	-.148	-.037	-.331	-.081	.299	-.024	-.060	-.268	.351	-.060

Rotated Factor Matrix

Items	11	12	13	14
Q1	-.026	-.001	-.665	.060
Q2	.076	.139	.139	.063
Q3	.231	-.087	.016	-.041
Q4	.123	.027	.143	-.031
Q5	.097	-.034	.023	.007
Q6	.074	.103	-.005	.070
Q7	-.055	-.101	-.339	.121
Q8	.208	.030	-.129	.379
Q9	.052	-.056	.013	-.194
Q10	.031	.152	-.101	-.166
Q11	-.009	.023	-.266	-.261
Q12	-.083	-.136	-.096	.043
Q13	-.026	-.004	-.032	-.047
Q14	-.033	-.214	.044	-.044
Q15	.044	-.070	.094	.057
Q16	-.064	.094	-.371	.102
Q17	-.027	.009	-.070	-.027
Q18	-.079	-.011	.218	-.123
Q19	-.029	.025	.091	-.098
Q20	-.029	-.038	-.066	.036
Q21	.507	.092	.053	-.185
Q22	.056	-.072	.078	-.002
Q23	.145	-.147	-.195	-.016
Q24	.079	-.099	-.087	.024
Q25	.185	-.038	-.240	-.087
Q26	.263	-.023	-.048	-.115

Rotated Factor Matrix

Items	11	12	13	14
Q27	.254	.370	-.083	.171
Q28	.751	-.028	.029	-.125
Q29	.269	-.587	.016	-.054
Q30	.060	.059	-.019	.026
Q31	.191	-.009	-.129	-.006
Q32	.070	-.119	-.093	.006
Q33	.010	-.031	-.413	-.278
Q34	.364	-.055	-.047	-.091
Q35	-.166	-.062	-.319	-.030
Q36	-.055	-.313	-.157	-.222
Q37	.147	.161	.004	-.662
Q38	-.077	.006	.149	-.133
Q39	-.039	.078	-.058	.023
Q40	.029	.100	-.571	.038
Q41	-.086	-.687	.038	.144
Q42	.043	-.062	-.059	-.114
Q43	.210	-.071	-.078	-.253
Q44	.125	-.020	.051	-.784
Q45	.092	.073	-.079	-.048
Q46	.291	.089	-.158	-.121

Rotated Factor Matrix - Parents

Items	1	2	3	4	5	6	7	8	9	10
Q1	.648	-.112	.052	.014	-.235	-.034	.095	.050	.064	-.121
Q2	-.211	.249	-.238	.015	.012	.076	-.180	-.630	-.237	-.044
Q3	.498	-.104	-.302	-.139	-.142	-.091	.124	-.065	-.003	.016
Q4	-.107	.097	-.086	.010	.040	.027	-.774	.126	-.031	.017
Q5	.053	-.158	-.113	-.004	.144	.065	-.686	-.220	-.181	-.083
Q6	.018	.007	.061	.043	-.107	.008	-.046	.043	-.091	-.394
Q7	.230	.054	.025	.047	-.519	-.233	.206	.001	-.087	-.211
Q8	-.209	-.181	-.042	.287	-.150	.045	-.453	-.127	.146	.032
Q9	.153	-.098	-.144	.149	.211	.482	-.209	-.285	-.067	-.070
Q10	.293	-.168	.245	.005	-.379	-.071	-.254	.080	-.092	-.095
Q11	.225	-.623	-.157	-.016	-.131	.043	-.101	.009	-.073	-.291
Q12	.147	.049	-.682	.152	.040	.131	-.258	-.089	-.150	.031
Q13	.015	-.135	-.132	-.143	-.216	.110	-.061	.017	-.020	-.688
Q14	.029	-.011	-.055	.022	-.007	.111	-.209	-.189	-.124	-.016
Q15	-.359	-.112	-.161	.578	.031	.026	.017	-.141	-.049	.122
Q16	.292	-.005	.040	-.003	-.125	-.415	-.078	-.085	.014	-.410
Q17	.142	.039	-.081	-.115	-.142	-.050	.120	-.035	.130	-.512
Q18	.087	-.027	-.050	.109	.015	.176	-.058	.027	-.805	-.097
Q19	.018	-.295	-.023	.331	-.136	.149	-.051	-.095	-.499	-.010
Q20	-.037	-.223	-.017	.177	-.112	.106	.044	-.185	-.042	-.647
Q21	-.146	-.232	.107	.061	-.144	.057	.010	.171	-.093	-.105
Q22	-.078	.034	-.355	.135	.314	-.030	-.004	-.032	-.340	-.021
Q23	.168	.113	.104	.072	-.134	-.015	-.144	-.063	-.124	-.528
Q24	.321	-.056	.027	.119	-.283	-.198	.021	.044	.051	-.473
Q25	.257	-.273	-.116	.023	-.223	-.245	.062	-.237	-.135	-.248
Q26	-.178	-.022	-.176	.137	.160	.156	-.023	.056	-.503	.282

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	-.010	-.037	-.087	.133	-.249	.103	.088	-.100	.139	-.087
Q28	.121	.155	.012	-.058	-.023	.194	-.031	-.071	-.082	.003
Q29	.077	.260	.062	.518	.153	.299	-.053	-.209	-.055	-.061
Q30	.101	-.161	.037	.039	-.276	.021	.070	-.634	.067	-.159
Q31	-.246	.144	-.095	-.101	-.207	.019	-.114	-.251	-.615	-.015
Q32	.204	-.140	-.071	.001	-.271	-.004	-.017	-.152	-.143	-.194
Q33	.123	-.009	.015	.054	-.682	.109	.095	-.136	-.006	-.085
Q34	.211	-.170	.053	.071	-.352	.215	.030	-.073	.068	-.081
Q35	-.109	-.227	.057	-.025	-.585	.281	.101	-.082	-.049	-.107
Q36	-.103	-.106	-.258	-.140	-.166	.625	.077	.015	-.192	-.040
Q37	.047	-.092	.042	.101	-.062	.188	-.032	-.049	.002	-.063
Q38	-.138	-.116	.153	.189	-.044	.530	-.031	-.230	-.034	.080
Q39	.385	-.088	-.112	.027	-.588	-.008	-.081	-.046	.049	-.142
Q40	.028	.092	-.184	-.121	-.621	-.161	-.099	.032	-.027	-.329
Q41	.124	.102	-.140	.420	-.045	-.129	-.225	.273	-.023	-.131
Q42	.049	-.008	-.133	.751	-.038	-.032	-.008	.048	-.131	-.015
Q43	-.009	.349	-.143	.154	-.297	.496	-.043	.032	-.168	.071
Q44	.016	.050	-.049	-.062	.007	.687	-.077	.057	-.134	-.132
Q45	-.147	-.219	-.653	.190	-.164	.118	-.041	-.034	-.054	-.199
Q46	-.054	.135	-.118	-.092	-.062	.273	-.018	.033	-.080	.158

Rotated Factor Matrix

Items	11	12	13	14
Q1	-.039	.137	.051	.092
Q2	-.140	.025	-.017	.078
Q3	.410	.266	-.040	-.033
Q4	.009	.079	.061	.143
Q5	-.044	-.141	-.141	.041
Q6	.673	.072	.078	-.141
Q7	.133	.124	.038	.173
Q8	.369	.067	-.083	.193
Q9	.049	.196	-.114	-.045
Q10	.275	.394	-.028	-.062
Q11	.061	.085	-.055	-.006
Q12	.122	-.068	.059	.125
Q13	.141	.031	-.042	.070
Q14	-.075	.029	-.042	.758
Q15	.033	.236	-.023	.216
Q16	.130	.127	.046	.225
Q17	.290	.351	-.109	.125
Q18	.024	.034	.048	.041
Q19	-.090	.103	.164	.207
Q20	.048	.046	.127	-.106
Q21	.035	.640	-.259	.111
Q22	.091	-.004	-.380	.399
Q23	-.111	.506	-.023	.038
Q24	-.009	.416	.038	-.060
Q25	.131	.418	-.021	-.179
Q26	.164	.150	-.310	.119

Rotated Factor Matrix

Items	11	12	13	14
Q27	.238	.680	.040	.001
Q28	-.146	.649	.005	.094
Q29	.201	-.215	-.180	.067
Q30	.080	.134	-.027	.156
Q31	-.010	-.005	-.352	-.001
Q32	.183	.576	.023	-.224
Q33	.148	.180	-.007	-.045
Q34	.026	.349	-.218	-.141
Q35	-.017	.148	-.069	.071
Q36	.136	.005	-.010	.296
Q37	-.112	-.020	-.767	-.000
Q38	.041	-.027	-.316	.084
Q39	-.067	.180	-.075	-.190
Q40	-.006	.124	-.018	.068
Q41	-.169	-.095	.056	.399
Q42	-.010	.067	-.034	-.090
Q43	.047	.022	-.238	.027
Q44	-.131	.234	-.173	-.046
Q45	-.176	.030	-.114	-.004
Q46	.093	.225	-.558	.026

Rotated Factor Matrix - Students

Items	1	2	3	4	5	6	7	8	9	10
Q1	.268	.015	.320	-.101	-.200	.124	.173	-.286	.040	-.192
Q2	.057	.075	.078	.021	.716	.072	.029	.014	.074	.163
Q3	.197	-.128	-.094	-.005	-.326	.166	-.252	-.079	.013	.370
Q4	-.039	-.009	-.018	.186	-.140	-.425	.118	.029	.152	-.166
Q5	-.160	.164	-.024	.024	.163	-.079	.011	.091	.698	-.087
Q6	.012	-.060	-.176	.382	.076	.001	-.105	-.205	.017	-.073
Q7	.057	-.200	.360	.081	-.251	-.103	.285	-.417	-.152	-.058
Q8	-.125	-.236	.081	.290	.057	-.052	-.480	-.159	.328	.017
Q9	-.017	.409	.124	.224	-.086	-.099	-.215	-.144	.458	.135
Q10	.230	.165	.070	.025	-.080	-.182	.111	-.043	.032	-.054
Q11	.195	-.002	.060	.030	-.192	.210	-.066	-.027	-.049	-.090
Q12	.052	.038	.085	-.056	-.046	-.810	-.144	.041	.040	.023
Q13	.082	-.073	.050	.013	.055	-.056	.063	-.099	-.088	.044
Q14	-.073	.097	.231	-.112	.322	.021	-.261	-.262	.105	-.147
Q15	-.032	.093	.144	.053	-.002	-.046	-.663	.003	-.015	-.028
Q16	.446	-.143	.092	.025	-.210	.122	.031	-.003	.045	-.249
Q17	.583	-.083	-.097	.009	.170	-.020	-.122	-.272	-.038	.031
Q18	.018	.414	.484	.191	-.145	-.001	-.166	-.048	-.012	.205
Q19	.102	.008	-.039	.025	.067	-.088	-.176	-.081	.133	.019
Q20	.217	.011	.060	.019	-.187	.019	-.028	-.042	.207	.008
Q21	.018	.166	.054	.766	-.002	.003	-.084	.045	.024	.030
Q22	-.162	.198	.319	.066	.236	-.251	-.359	-.058	.132	-.053
Q23	.722	.027	-.231	.075	.037	-.144	.039	-.049	-.037	.028
Q24	.698	-.162	.028	-.086	.008	.014	.150	-.076	-.115	-.130
Q25	.500	.020	.164	.024	-.198	.114	.067	-.073	-.028	-.056
Q26	-.216	-.095	-.034	.333	.089	-.162	-.127	.040	-.114	.021

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.368	.253	.040	.348	-.053	-.097	-.183	-.150	-.338	.056
Q28	.032	.153	.213	.287	.219	.056	.099	.248	-.029	.308
Q29	-.055	.073	-.072	-.102	.041	-.175	-.469	-.071	.153	.016
Q30	.145	.118	.061	.181	.014	-.020	.111	-.066	-.017	-.163
Q31	-.188	.446	.120	.266	.261	-.052	.062	-.115	.052	.067
Q32	.549	.095	.196	.083	-.105	.064	.041	-.041	.024	.131
Q33	.220	.176	.045	.028	-.089	.135	-.084	-.721	-.011	.106
Q34	.235	.067	-.055	.477	-.110	.308	.096	-.328	.264	.113
Q35	.098	.096	-.101	.020	.111	-.089	.066	-.608	-.023	-.071
Q36	-.275	.444	-.093	.019	-.035	.022	-.152	-.120	-.199	.001
Q37	-.054	.235	.122	-.060	.084	.017	.123	-.011	.039	.042
Q38	.070	.292	.015	.014	.024	.127	-.273	.112	.112	.233
Q39	.258	.028	.147	.056	-.497	-.011	.276	-.101	-.038	.045
Q40	.233	.022	.138	-.063	-.022	-.085	-.010	-.184	.026	.048
Q41	.030	-.143	.162	-.081	-.113	-.182	-.137	-.058	.108	-.669
Q42	-.076	.155	.064	.030	.002	-.033	-.590	.128	-.161	-.236
Q43	-.065	.700	.059	.095	.126	.069	-.034	-.115	-.029	.006
Q44	.048	.683	-.084	.009	-.029	-.129	-.081	.024	.220	.106
Q45	-.004	-.040	.715	-.016	.099	-.083	-.164	.045	.007	-.039
Q46	-.128	.068	.199	-.007	.063	-.248	.087	-.111	.073	.603

Rotated Factor Matrix

Items	11	12	13	14	15
Q1	-.240	.193	.030	.156	-.207
Q2	-.008	.043	.090	.153	.051
Q3	-.191	.278	-.274	.094	.028
Q4	-.178	-.160	.138	.108	.455
Q5	-.163	-.006	.016	.023	.250
Q6	-.452	-.064	-.083	.037	-.387
Q7	-.082	.115	-.160	-.113	-.019
Q8	-.097	.099	.020	.056	-.123
Q9	.221	-.095	.048	.246	.010
Q10	-.105	-.030	-.678	.029	-.188
Q11	-.117	.153	-.630	.093	.121
Q12	.006	.088	-.024	.032	.083
Q13	-.731	.077	-.144	.072	.003
Q14	.033	-.354	.022	.157	.422
Q15	.181	-.061	.011	.138	.108
Q16	-.024	.380	-.025	-.087	.158
Q17	.141	.300	-.226	-.052	.061
Q18	.083	-.012	.106	-.003	.089
Q19	.073	-.008	.003	.005	.671
Q20	-.633	.073	.019	-.113	.013
Q21	-.066	.023	.001	.009	.060
Q22	.084	-.055	.054	.095	.130
Q23	-.121	-.060	-.059	.018	-.009
Q24	-.099	.030	-.072	-.051	.061
Q25	-.260	.113	-.168	-.008	.003
Q26	.185	-.061	-.060	.567	.119

Rotated Factor Matrix

Items	11	12	13	14	15
Q27	-.198	-.076	.204	.010	-.116
Q28	-.106	.039	-.100	.164	.374
Q29	-.068	.133	.118	.508	-.042
Q30	-.159	.489	.272	.368	.001
Q31	.141	.146	-.259	-.097	.208
Q32	-.023	.381	-.056	-.079	-.077
Q33	-.126	-.014	.056	.031	.060
Q34	.116	.096	-.118	.092	.038
Q35	-.129	.376	-.128	-.065	.035
Q36	-.205	.367	.012	.128	.335
Q37	-.019	-.045	-.260	.653	.054
Q38	-.052	-.117	.117	.544	-.013
Q39	-.138	.195	-.209	.059	-.045
Q40	-.055	.647	-.172	-.130	-.103
Q41	-.014	-.014	-.140	.043	.075
Q42	-.187	-.030	-.060	-.152	.135
Q43	.048	.013	-.001	.123	.041
Q44	-.015	.009	-.121	.145	-.081
Q45	-.086	.097	-.125	.049	-.011
Q46	-.022	-.065	-.003	.194	.076

Rotated Factor Matrix - Business and Industry Employers

Items	1	2	3	4	5	6	7	8	9	10
Q1	.098	.010	-.052	-.061	-.785	.034	.093	-.116	.046	-.135
Q2	.075	.149	.656	.261	.023	-.019	-.019	.084	.068	.271
Q3	-.072	-.424	-.034	.138	-.305	.061	.543	-.120	.067	-.132
Q4	.035	.021	.158	-.147	-.017	-.357	.400	.128	-.004	.273
Q5	.001	.065	.798	-.278	.020	.038	.137	-.092	-.091	-.079
Q6	-.093	-.134	.087	-.270	-.097	-.011	.654	-.063	.064	.094
Q7	-.172	-.270	.046	-.063	-.714	.059	-.081	.033	-.139	.148
Q8	.045	-.067	.251	-.077	-.077	-.145	-.020	.096	.196	.173
Q9	.220	.052	.152	-.178	.263	.049	.460	.157	-.212	.217
Q10	-.038	-.656	.002	-.174	-.091	.124	.063	.025	.128	.146
Q11	.200	-.248	-.002	.037	-.001	.093	.042	.052	-.105	.066
Q12	.115	-.104	.091	-.251	.204	.481	-.095	.056	-.122	.097
Q13	.128	-.212	-.000	-.011	.015	.204	.667	.205	-.006	.040
Q14	-.041	.005	-.177	-.372	.186	-.107	.058	.346	-.111	.261
Q15	.163	-.083	-.146	.073	-.004	.160	.064	.723	-.195	-.125
Q16	-.034	-.251	.078	-.024	-.222	.598	.357	.112	-.019	-.327
Q17	-.017	-.322	-.095	-.006	-.019	.780	.194	.044	-.007	-.028
Q18	-.031	-.251	.037	-.600	.228	.089	.037	.013	-.500	-.118
Q19	.132	-.038	.090	-.006	-.033	.047	.054	.019	-.766	.033
Q20	.494	-.107	.024	-.101	.091	.252	.471	.103	-.157	-.039
Q21	.405	-.370	-.156	.071	.069	.083	.160	.142	-.321	.241
Q22	.201	-.016	-.052	-.174	-.064	.002	.214	.563	-.289	.094
Q23	.086	-.523	-.212	.301	.087	.308	-.079	.033	-.250	-.026
Q24	.104	-.581	-.246	-.224	-.036	.428	.106	-.043	.065	.258
Q25	.102	-.688	-.056	-.039	-.219	.151	.302	.030	-.065	-.033
Q26	.287	-.118	-.124	-.236	-.221	.092	-.101	.171	-.652	-.070

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.048	-.730	-.105	-.116	.030	.126	.165	.203	-.035	-.322
Q28	.253	-.681	-.168	-.079	.102	.004	.002	.195	-.423	.026
Q29	.145	-.187	.279	-.099	-.143	.573	.007	.261	-.296	.120
Q30	.294	-.229	-.105	.054	.061	.229	.419	.181	-.416	.059
Q31	.297	-.208	.056	-.591	.004	-.020	.374	.148	-.304	-.140
Q32	.109	-.848	.069	-.023	-.090	.169	-.010	.114	-.112	-.064
Q33	-.042	-.586	-.011	-.131	-.029	-.072	.214	-.173	-.057	.165
Q34	.229	-.316	-.045	-.098	-.027	-.022	.127	.041	-.023	.095
Q35	.061	.019	.052	.198	-.336	.231	.216	.176	-.217	.115
Q36	.266	-.057	.007	-.708	-.230	.113	.137	.160	.036	.160
Q37	.561	.112	.137	-.338	-.180	-.012	.109	.234	-.267	.005
Q38	.364	-.020	-.072	-.139	-.119	.136	.114	.392	.003	.160
Q39	.345	-.577	.183	.121	.019	.085	.161	.206	.135	-.151
Q40	.414	-.243	-.028	.182	-.160	.227	-.010	-.167	.372	.019
Q41	.077	.045	.117	-.033	.023	-.005	.107	.045	-.002	.772
Q42	.036	-.243	.201	-.172	.186	.041	.016	.732	.116	.101
Q43	.673	-.219	-.027	-.139	.162	-.186	-.021	.117	-.213	.059
Q44	.691	-.190	.135	-.236	-.051	-.094	-.123	.276	-.177	-.067
Q45	.626	-.037	-.027	.058	-.004	.242	.163	-.058	-.010	.119
Q46	.345	-.092	.145	-.097	.154	.052	.041	.038	-.368	.017

Rotated Factor Matrix

Items	11	12	13
Q1	-.169	-.006	-.022
Q2	.044	-.037	.042
Q3	-.226	.040	.210
Q4	.242	.470	.176
Q5	-.035	.057	.184
Q6	.012	.025	-.233
Q7	.213	.041	.086
Q8	-.002	.044	.757
Q9	-.213	.113	-.007
Q10	-.412	.156	.009
Q11	-.141	.753	-.036
Q12	.451	.236	.318
Q13	-.118	.141	.068
Q14	-.234	.484	.176
Q15	-.120	.084	.183
Q16	.078	.287	-.100
Q17	-.135	.048	-.079
Q18	-.208	.053	.005
Q19	.011	.217	-.099
Q20	-.232	-.029	.140
Q21	-.175	.060	-.277
Q22	-.110	.168	-.146
Q23	-.019	.059	.332
Q24	.040	-.054	-.144
Q25	.081	-.016	.079
Q26	-.213	-.137	-.014

Rotated Factor Matrix

Items	11	12	13
Q27	-.022	.165	.113
Q28	.093	-.035	-.080
Q29	-.006	-.138	-.095
Q30	.076	-.223	.093
Q31	-.011	-.085	.166
Q32	-.149	.036	-.097
Q33	-.137	.088	.429
Q34	-.696	.198	.033
Q35	-.335	.440	.257
Q36	-.054	-.038	.020
Q37	-.201	.150	.073
Q38	-.575	.179	.060
Q39	-.110	.376	-.025
Q40	-.115	.408	.121
Q41	-.117	.150	.151
Q42	.042	-.033	-.023
Q43	-.100	.015	-.196
Q44	-.115	.127	-.068
Q45	-.096	.120	.230
Q46	-.585	.006	-.003

Rotated Factor Matrix - General Public

Items	1	2	3	4	5	6	7	8	9	10
Q1	.124	.107	.068	-.222	.002	.011	.061	.009	-.803	.039
Q2	.037	.025	.010	-.216	-.560	.097	.381	-.314	.267	-.256
Q3	.275	-.186	-.149	.125	-.013	-.057	-.232	-.157	-.760	-.051
Q4	.116	.034	.160	-.850	.009	.141	.076	-.068	.012	.020
Q5	.203	-.067	-.098	-.780	-.269	-.080	.054	-.131	-.121	-.140
Q6	.133	.107	-.489	-.006	-.231	.036	.034	-.336	-.097	.420
Q7	.134	-.133	-.183	-.231	-.015	-.239	.016	-.007	-.103	-.002
Q8	-.038	.336	.243	-.002	-.085	-.022	-.220	-.509	-.431	-.030
Q9	.069	.372	-.164	-.183	-.517	.413	.243	-.020	-.023	.259
Q10	.572	.013	-.138	-.014	-.321	.114	.074	.083	-.521	-.057
Q11	.394	-.141	-.070	.195	-.074	-.012	-.462	-.054	-.438	-.344
Q12	-.148	.066	-.119	.036	-.760	.058	.008	-.159	-.059	-.227
Q13	-.089	.164	-.855	.070	-.067	-.063	-.103	.073	-.140	-.032
Q14	-.032	.131	-.247	-.124	-.208	.132	.239	-.758	-.035	-.060
Q15	-.175	.210	-.112	-.351	-.580	.024	.015	-.036	-.241	-.131
Q16	.143	-.010	-.225	-.003	-.128	-.023	-.255	.043	-.143	-.079
Q17	.302	.024	-.125	-.056	.017	-.202	.045	-.020	-.231	-.103
Q18	.134	-.000	-.181	-.124	-.063	.413	.300	-.541	-.110	-.250
Q19	.105	.334	.037	-.012	.053	.689	.442	-.100	.072	-.009
Q20	.080	.047	-.729	.019	-.109	.184	.177	-.295	.205	.117
Q21	.608	.074	-.086	-.136	.155	.224	.110	-.120	-.088	-.038
Q22	.105	-.019	-.023	-.103	-.230	.147	.839	-.180	.099	-.091
Q23	.585	.086	.102	.097	-.041	.147	.094	.359	-.217	.045
Q24	.655	.066	-.055	-.007	-.001	.005	-.164	.123	-.226	-.158
Q25	.697	-.040	-.154	.096	.103	.002	-.059	.125	-.193	-.116
Q26	.194	.336	-.069	.206	.114	.289	.499	-.067	.021	-.220

Rotated Factor Matrix

Items	1	2	3	4	5	6	7	8	9	10
Q27	.737	.187	.129	-.053	-.033	.057	-.050	-.481	.024	-.093
Q28	.827	.192	.150	-.099	.067	.139	.170	-.106	.092	.096
Q29	.039	.800	-.106	-.000	-.276	.100	-.004	-.153	-.085	-.073
Q30	.647	.143	-.083	-.124	-.152	-.048	-.021	-.079	.155	.419
Q31	.195	.061	.049	-.070	-.057	.853	-.035	.002	-.004	.017
Q32	.834	-.035	.018	-.132	.057	.131	-.025	.090	-.174	-.121
Q33	.418	.004	-.157	-.078	-.124	.271	.259	-.172	-.077	-.186
Q34	.748	.217	-.050	-.085	.047	.109	.231	.036	-.189	-.183
Q35	.267	.221	.118	.015	.057	.280	.228	-.084	-.096	-.117
Q36	.012	.147	-.444	-.034	-.018	.490	.084	-.288	-.141	-.087
Q37	.265	.652	.003	.075	.001	.298	.260	-.073	.043	-.087
Q38	.144	.516	-.343	-.361	.095	.124	.425	-.028	-.035	-.043
Q39	.560	.266	-.129	.296	.026	.071	.343	-.156	-.215	-.129
Q40	.322	.137	-.137	.148	-.065	.296	-.031	-.071	-.123	.035
Q41	.126	.133	-.033	-.158	-.286	.125	.153	-.033	.065	-.684
Q42	.140	.232	.107	-.029	-.171	-.173	.022	-.228	-.102	-.660
Q43	.073	.308	-.236	-.161	-.190	.574	.181	-.143	.049	.021
Q44	.292	.511	-.070	.275	-.183	.624	.093	-.095	-.008	.087
Q45	.384	.623	-.255	-.076	.040	.267	-.154	.030	.140	-.182
Q46	.485	.219	.104	-.166	-.143	.081	.454	.067	-.065	.226

Rotated Factor Matrix

Items	11	12	13
Q1	-.100	-.166	.147
Q2	.231	-.021	.001
Q3	-.055	-.194	-.112
Q4	-.054	-.120	.216
Q5	.075	.214	-.040
Q6	-.167	-.223	.216
Q7	-.054	.006	.782
Q8	-.292	-.009	.122
Q9	-.050	-.011	-.089
Q10	-.159	.034	.327
Q11	-.172	-.017	-.126
Q12	-.313	-.023	.022
Q13	-.010	-.048	.142
Q14	-.027	-.037	-.054
Q15	.383	-.040	-.003
Q16	-.724	-.227	-.075
Q17	-.373	-.740	.021
Q18	.266	-.001	-.005
Q19	.009	.086	.073
Q20	-.036	-.181	.001
Q21	-.058	-.240	.191
Q22	-.054	-.058	.032
Q23	-.468	-.011	-.086
Q24	-.214	-.504	-.113
Q25	-.027	-.381	.094
Q26	-.038	.307	-.035

Rotated Factor Matrix

Items	11	12	13
Q27	-.063	.090	-.048
Q28	.006	-.009	.056
Q29	-.101	-.102	-.114
Q30	-.081	-.060	-.000
Q31	-.175	-.100	-.139
Q32	-.070	-.086	-.129
Q33	-.517	-.351	.119
Q34	-.228	-.139	.143
Q35	-.763	-.110	.140
Q36	-.288	.144	-.395
Q37	-.021	-.051	-.040
Q38	.063	.170	-.215
Q39	.003	.021	.374
Q40	-.063	-.722	-.004
Q41	-.101	-.260	-.006
Q42	-.184	.083	.069
Q43	.037	-.059	-.336
Q44	-.084	-.092	.027
Q45	-.053	-.088	.058
Q46	-.071	-.364	-.316